For The
Northeast
Farmer

JANUARY 1969

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and the
RURAL NEW YORKER

Three partners now earn a comfortable living from a 290-acre dairy farm.

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Fred Bohn and his two sons operate Swatara Dairy Farms near Meyerstown, Penna., as a partnership. In eight years, they've brought it from low productivity to a point where it can easily support a 100-cow dairy herd. There are now 83 milkers with a herd average of more than 15,500 pounds, plus dry cows and young stock.

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worked for the Bohns:

"We were having a breeding problem," said Mr. Bohn. "It was taking several services to get cows bred. We had our forage analyzed at Penn State and sent these findings along to Agway, together with all the facts about the grains and concentrates we were using. We got an Agway 'Profile Report' on our feed, which showed the trouble was caused by the wrong mineral balance. Too much calcium and not enough phosphorus.

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Fred Bohn and Clair Hindman get together at least twice a month to review current activities, plan ahead. Profile reports play a key role in these discussions.

The Bohns (Fred, Ray, Fred J.) with Clair Hindman. Men like Hindman act as advisers, can bring in specialists to help solve specific problems.

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For The Northeast Farmer

American Agriculturist and the RURAL NEW YORKER

Vol. 166, No. 1

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OUR COVER

As we begin 1969, the world seems to be carrying more than its normal burden of negative forces . . . war, tension, crime, and despair. But the church buildings across the land remind us that there **are** people who hope for better things . . . and who seek in spiritual growth the answers to the problems of human existence.

This is the West Middlebury Baptist Church (south of Batavia, N. Y.), built in 1823 with timbers from the surrounding hills.

Photo: Mrs. Paul Barker

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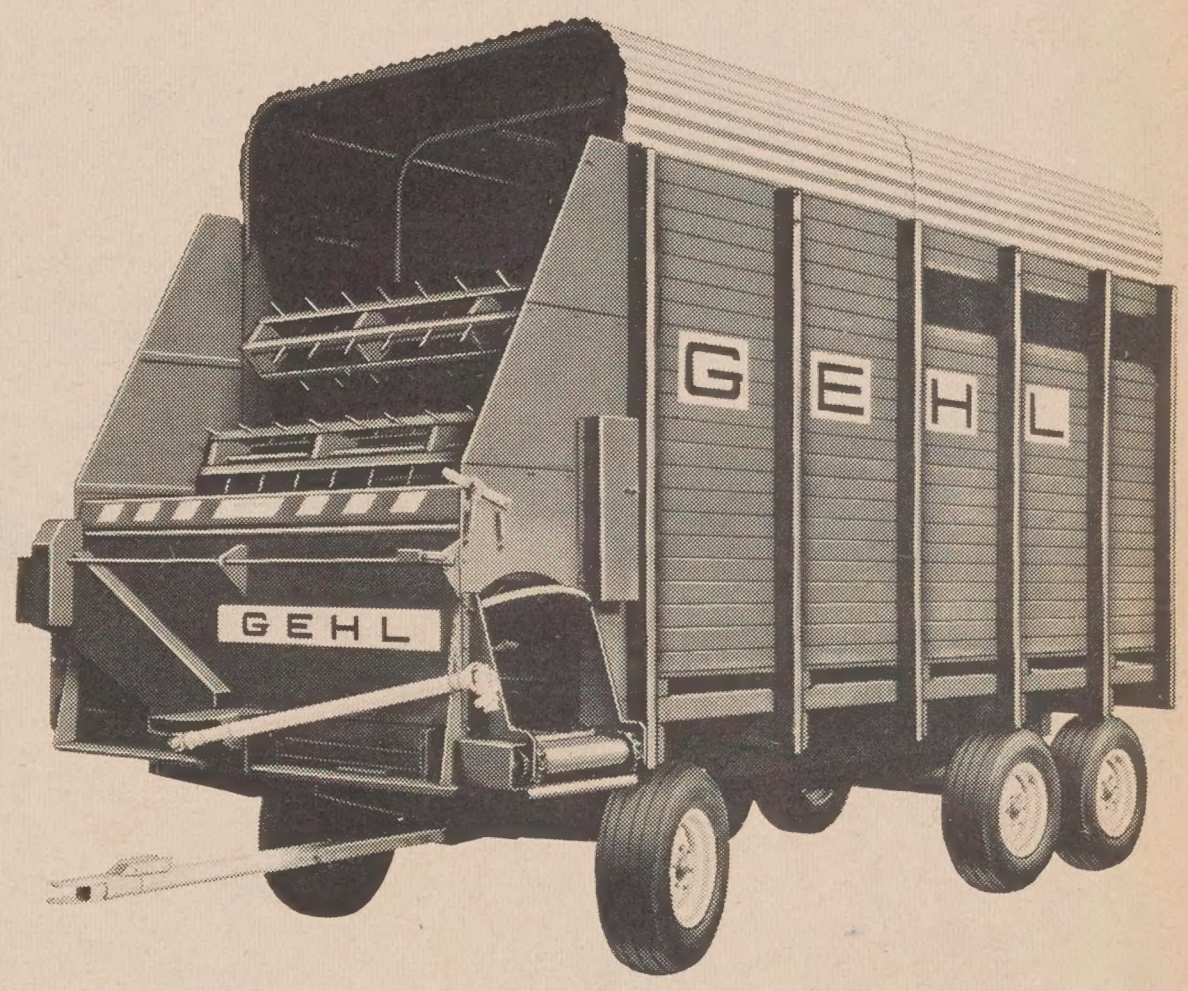

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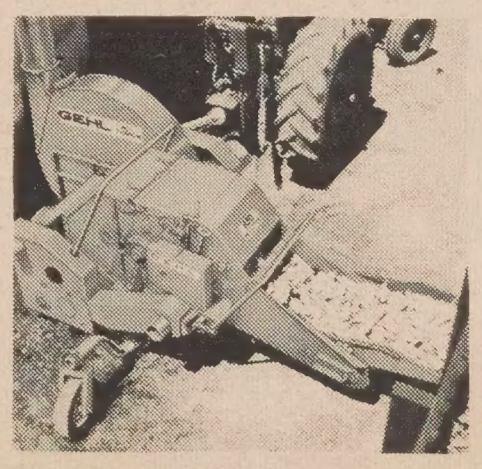

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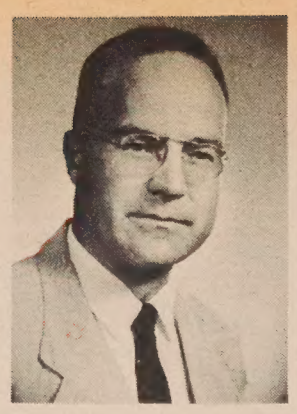
EDITORIALS



by GORDON CONKLIN

NEED A LID

The handwriting is clearly on the wall for a limitation on the size of farm program payments to any one individual. In fact, I'd bet the overwhelming majority of commercial farmers would favor such a limitation.

I have a book in my office . . . 1506 pages in length . . . listing every farmer or corporation in the USA who received government payments from the ASCS in calendar year 1967 amounting to $5000 or more. In the nine states of the Northeast (New England, New York, Pennsylvania, New Jersey), there are only 205 listed . . . compared with 23, 505 in the State of Texas!

Of the 205 in the Northeast, only three received $20,000 or more . . . the maximum cut-off point very nearly made law by the last Congress. There were 28 northeasterners receiving $10,000 or more in 1967 from ASCS. A limitation of $20,000 wouldn't affect northeastern agriculture . . . and, in my opinion, would be desirable.

In the country as a whole, five compliers with federal farm programs received a total of $11 million in 1967 . . . and another 276 got from $100,000 to $1,000,000 each. Farmers have been worrying more than usual lately about good public relations for agriculture; they can hardly afford that kind of publicity!

Unless large payments to well-heeled landowners come to a screeching halt, I'd bet that an urban-oriented Congress will sweep away the whole kit and caboodle of farm programs . . . including some that the majority of farmers really need.

SOUND OR SUBSTANCE?

Once upon a time, in the far-off place of Hometown, there lived the Everyman family. There were two children . . . daughter Mini was attending the local BCC (Bigdome Community College), and son Rock was in high school.

Now it came to pass that Rock arrived home from school very early one day, and his mother asked how come.

"Teach said that they're all going out on strike for higher wages and the right to hire and fire the principals."

His mother thought a moment, "Isn't there a law making it illegal for teachers to strike . . . what did Miss Informed say about that?"

"Oh sure, but Teach said it was a bad and discriminatory law, and she had no intention of worrying about it.

"Say, Mom, you and the old man can get along faster with that lawsuit against the school district now that it's closed down and all the principals have time to appear in court. Guess we'll show 'em that I can wear pink stretch pants and a toga to school if I want to, huh?"

Meanwhile, back at BCC, Mini was attending an LSD class (Latest Social Developments). Teaching it was one Professor Sawkitoomee . . . a gent with burning eyes and dainty mannerisms. He was active in passing out matches at draft card burn-ins, and had once led a small student group known as WARPED (We Attack Responsible People Every Day).

It was after an especially WARPED weekend that the Hometown PTA sponsored an emergency meeting to discuss the frightening increase in juvenile delinquency and teenage crime that was making the community a dangerous and disturbing place in which to live. Prominent among those attending were Mr. and Mrs. Everyman, Miss Informed, and Professor S. . . . each of them spoke of the desperate need to **do** something about the breakdown of society!

Alas! Their doing had already been done. What they **said** the young folks could not hear . . . for it was drowned out by the thousand voices of example.

MILK PRICING

At the moment, the minimum farm price of Class I milk in every federal milk marketing order across the nation is set, after lengthy hearings, by USDA action . . . there are no economic formulas in operation. Only a few years ago, some markets depended upon a formula to set prices, based upon such things as a supply-demand factor and the general level of wholesale prices in the U.S. Stewart Johnson of the University of Connecticut predicted recently that chances are "less than 50-50" for a return to formula pricing of milk in the foreseeable future.

Nevertheless, the New York-New England Dairy Cooperative Coordinating Committee is trying to come up with a new economic formula for pricing milk in the Northeast. It seems to me that, in the long run, a realistic economic formula would be more desirable than having the price set and re-set by government.

EVER CLOSER

The hot breath of farm worker strikes during harvest time came closer to the Northeast in 1968. As a foretaste of things to come, the Campbell Soup Company was tied up during much of the tomato harvest season . . . not by farm workers, but by employees who worked in the company's processing plants. Fortunately for farmers, Campbell offered payment on the unharvested portion of the crop.

In New York State, a brother of Cesar Chavez (leader of the United Farm Workers Organizing Committee in California) is reported to have tried to organize harvest workers in Wayne County . . . but couldn't get an affirmative strike vote at meetings in Rochester or Geneva. Meanwhile, in the table grape distributing system across the land, UFWOC worked to promote a grape boycott by handlers and consumers.

There has been no strike of table grape pickers in California, but UFWOC sought to use food trade unions in major cities to pressure retail food stores and produce wholesalers into a boycott of California grapes. The organization also threatened to put picket lines around retail stores handling California grapes. This pressure, in turn, was intended to force farmers to sign closed-shop contracts with UFWOC . . . and force workers to join the union. Up until now, UFWOC has been unable to voluntarily sign up a majority of table grape workers.

Actually, a secondary boycott is illegal under federal law . . . probably about as ineffective, though, as is the Taylor Law's prohibition of teacher strikes in New York State! The gut issue here is whether farmers can be forced to in turn force their employees to join a union . . . whether the majority of workers desire to or not.

Farmers, of course, are terribly vulnerable to the threat of strikes at harvest time . . . when a few days' delay can cost the producer everything he has invested in the crop. In 1969, though, the pressure will probably be intensified on the labor front.

Another reason to support strong farm organizations that can help as the crunch comes . . . and to work on developing good labor relations with the employees you have!

CUSSING CO-OPS

A few years ago, I received from time to time a number of letters from dairymen saying, "The milk co-ops have **never** done anything for dairymen!" Many of them went on to damn everyone in sight for low milk prices . . . including editors of farm publications.

Time passed, and now the farm price of milk in the Northeast is higher than ever before . . . and grain prices are unusually low. I receive no more "damn the co-ops" letters . . . but I'd be willing to bet that the co-ops have received mighty few letters from anyone expressing appreciation for helping to bring higher milk prices to pass!

How small a dimension lies within the line fences enclosing the lives of we mortals!

AFFAIR OF THE HEART

The American Heart Association has since 1961 advised people to reduce the amounts of saturated fats and cholesterol in their diets . . . primarily by substituting certain vegetable fats for animal fats on the menu. Supposedly this will reduce the incidence of heart attacks.

Now Dr. E. Cuyler Hammond of the American Cancer Society gets into the act by reporting that "death rates from heart attacks and strokes were lower in groups of people who consumed large amounts of cholesterol in their diets than people who consumed little cholesterol." This from a six-year statistical study of 800,000 people.

While the experts disagree, folks, let's use common sense in our living habits . . . and hope that when death comes it will be mercifully quick (like a heart attack), instead of the death by inches so typical of the degenerative diseases.

GUEST EDITORIAL

Dr. Irvine Page, eminent researcher, himself a victim of a heart attack, has outlined the profile of a man least likely to have coronary disease as follows: "He is," said Dr. Page, "an effeminate municipal worker or embalmer, completely lacking in physical and mental alertness, without drive, ambition, or competitive spirits, who has never attempted to meet a deadline of any kind. A man with poor appetite subsisting on fruits and vegetables, laced with corn and whale oil, detesting tobacco, and spurning ownership of radio, TV, or motor car. He has a full head of hair and is scrawny and unathletic in appearance; yet he is constantly straining his puny muscles with exercise. He is low in income, blood pressure, blood sugar, uric acid, and cholesterol."

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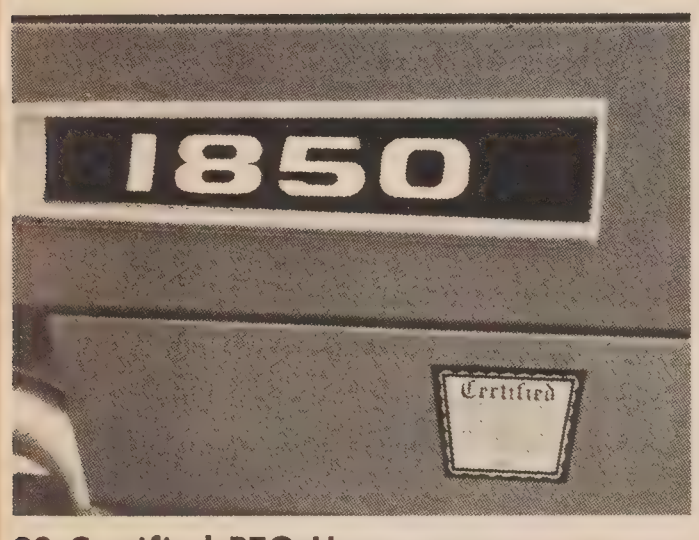

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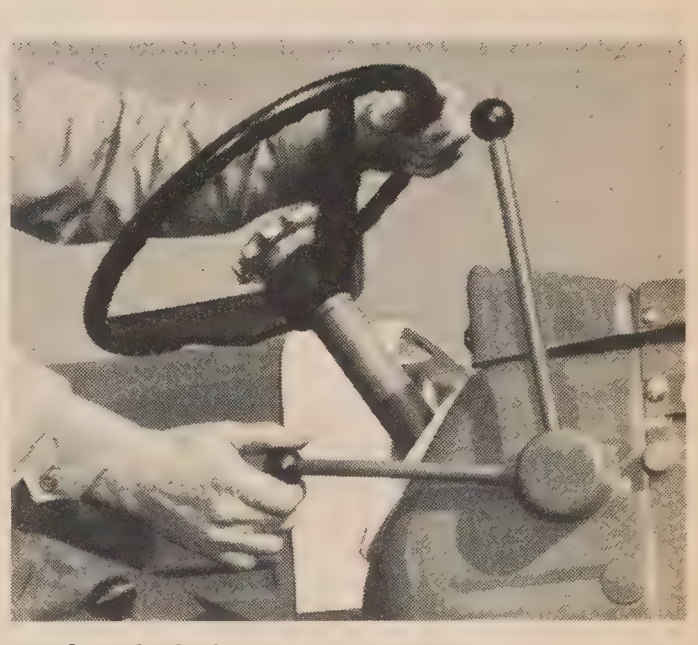

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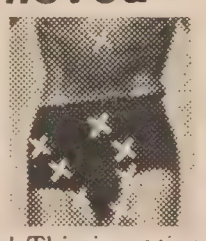

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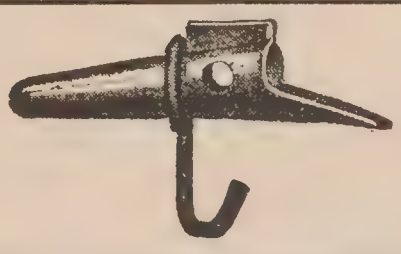

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DOC METTLER COMMENTS ON

The author is a practicing veterinarian at Copake Falls, New York

GETTING A VET

QUITE some time ago I overheard a conversation in a crowded room that went like this:

"Well, hello, Ben. How is your farming operation going?"

"Not as good as I'd hoped, Jim. It has been years since I've had any livestock, and when I moved up here to the country I couldn't wait to get started. But I'm having my troubles."

"What sort of troubles?"

"Well, I can't get veterinary service, for one thing."

"That's odd. There are three or four vets not too far from you. Have you tried Dr. Young? He's my vet."

"Huh! He can't care much for new clients. Why, I called him the other night when I thought Bessie was having trouble calving, and he didn't even call me back."

"You mean you called him on a calving case and he didn't come? Did you make it clear to him what you wanted and where your farm was?"

"I didn't talk to him. I just told that dumb woman he had answering the phone to have him call me back."

"So what happened?"

"Well, Bessie calved after a while, but the calf was dead."

"What about Dr. Gray over the county line from you? Have you tried him?"

"Fat chance of getting him. He's never in, same as Young. He always has some kid answering the phone."

"What about Dr. Black?"

"Even worse. He has one of those darned recorders. He's never in, and I'll be darned if I'll talk to a machine. I can't figure it. I pay my bills, but I can't get a vet when I want one."

Don't Wait

For the farmers who pay their bills but can't get a vet when they want one, I'll try to explain why, so as to help them and their veterinarians. In the first place, when you move into a new area or obtain animals for the first time, and expect to need veterinary service, don't wait for an emergency to arise before looking for a veterinarian.

Your neighbors can tell you who and how to call. Usually the closest man is the best for you. However, inquire as to whether the particular veterinarian you want works on the kind of animal you have. A small animal veterinarian doesn't care to go out and help a sow farrow, and a veterinarian who specializes in horses doesn't want to trim a dog's toenails.

Try to visit the veterinarian at his office if he has office hours. Otherwise phone him and leave a message that you are Mr. Jones up at the old Finch place, that you have a few Herefords, and may some day be needing him. Tell whoever answers the phone that you'd like the veterinarian to stop on his way through some time to say hello, or ask when you could see him.

Most important, don't ever call a veterinarian and simply leave a message for him to call you back with no explanation of what it is all about. I have hurried to call people back when I'm so busy I haven't eaten a meal in twelve hours only to find they wanted to know where to buy a poodle puppy . . . cheap, of course. The "dumb woman" on the phone may be his mother or wife, and no matter how she sounds to you she is experienced at taking messages. All you have to say is, "This is John Jones up on the old Finch place. I have a cow that may be having trouble calving; will you please ask the doctor to come as soon as possible." You might add, "I'll have her in a box stall and be waiting for him."

Non-Emergencies

There are even people who will call up and if the veterinarian himself doesn't answer the phone will hang up with no explanation, complaining later to a neighbor, "That Doc Gray, he's always out." If he is a large animal veterinarian, of course he is out. But chances are he has a two-way radio, or will be able to be reached from his office by phone in short order.

Of course, on non-emergency calls, if you call early in the morning, or a day ahead, you are more apt to get service when you want it. In our practice we like to be on the road by eight, and have tried to tell our clients that . . . yet after more than twenty years there are those few who will call at 9 a.m. and tell the office man, "I've got twelve cows standing in the barn for pregnancy exams. Tell Doc to come right away, because I don't want to have to wait around."

What are we supposed to do . . . let some work go for someone who planned a day ahead in order to take care of this inconsiderate person? Of course, there is the variation of this, the man who calls most any hour of the day or night with a big "emergency." While the veterinarian is at the farm to take care of the emergency, he is asked to examine or look at half a dozen other non-emergency cases. In the meantime, some other farmer who planned ahead is kept wait-

(Continued on page 18)

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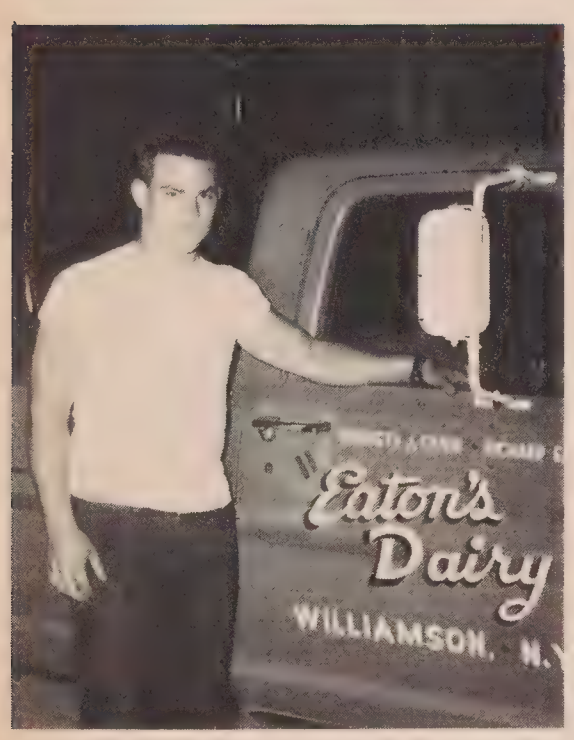

Wayne County dairyman Richard Eaton.

VO-AG HELPED

At the age of 16, Richard Eaton of Williamson, New York, recently awarded the American Farmer degree, assumed much of the responsibility for the operation of the 153-acre home farm, because his father could not manage the farm and work as an artificial inseminator.

In the five years since then, Richard has built the herd up from 30 registered Holstein milking cows to 49 milk cows and 61 head of young cattle. His present herd average is 15,500 pounds of milk, and 510 pounds of butterfat.

Richard now manages 300 acres of cropland . . . 55 acres in corn, 40 acres of oats, and 20 acres in wheat . . . the remainder of the land is in hay and pasture. In addition, he started his own home delivery dairy route and currently delivers approximately 6000 quarts of milk a week.

Richard and his father have a written agreement. Richard receives 90 percent of the profits from the farm and 50 percent of the profits from the home delivery route.

When Richard took over the management, he was enrolled in the Vo-Ag class at Williamson High School. "I was the only dairyman in the class," he said, "so the instructor gave me special assignments. One of the most valuable was in repairing equipment. I rebuilt a couple of tractors as well as other equipment. Also, I learned how to express myself before a group of people, which has helped a lot."

Richard has won many honors as a member of the Future Farmers of America (FFA). In 1966 he was named an Empire Farmer, star FFA Dairy Farmer, and Star Dairy Farmer for the North Atlantic Region. This brought him to Kansas City, Missouri, and the award of the coveted American Farmer degree.

Among the qualifications for the American Farmer Degree is that the recipient must be actively engaged in farming, and have earned or invested a minimum of $1000. Richard (now 21 years old, married, and the father of a son) is presently buying the farm from his father and has great plans for its future.

"This farm has 300 acres, part of which is rented," said Richard. "We are milking 35, and 12 are dry right now. We still use cans, which isn't much of a handicap because we take the milk to a plant where it is pasteurized and bottled, and then we deliver it. We have two routes, one of which my father handles while I do the other."

However, Richard plans to double the size of the herd, and to do this a new barn will be started in the spring of 1969. "Right now," says Richard, "I haven't fully decided whether it will be a stanchion barn or a free stall setup.

"For a good many years," continued Richard, "this farm was a combination dairy and fruit farm. My interest has been cows, so I took out 40 acres of apple trees."

I mentioned the cost of equipment and got this comment, "Every year I plan to replace one old piece of equipment or buy a new one that I need." — *H.L.C.*

COWS AND SYRUP

Most of us would consider a dairy farm with 200 animals . . . 100 milkers . . . a big business. Likewise, producing 700 to 1000 gallons of maple syrup from 3500 trees takes a lot of doing!

Add to that the fact that for two months in the spring the family runs (in connection with sap boiling) a restaurant specializing in pancakes, sausage, and maple syrup. For variety you can choose ham and eggs, hamburger, and homemade pie.

That's what Ronald Cartwright and his family do at R.D.1, Angelica, New York. And if you aren't yet sufficiently impressed, I'll add that this is a family enterprise, with four boys aged 11 to 18 helping in the sugar bush, and two girls 10 and 16 helping in the restaurant.

"We have had as many as 500 guests on a Sunday," said Mrs. Cartwright. Sometimes we entertain a busload of school children, once from as far away as Tonawanda. People come to watch the maple syrup operation as well as to eat and most of them take home some maple syrup, maple sugar or maple creme."

Along with other types of farming, maple syrup production has seen many innovations. Mr. Cartwright taps with a power bit, puts a disinfecting capsule into each taphole, and uses ultraviolet light at the storage tanks to keep the sap sweet.

The sap from some trees is brought to the evaporator in plastic tubes, but the land is relatively level and there is insufficient slope to use this method for all trees. Much of the sap is gathered by three outfits, each with a 10-barrel tank. Two evaporators produce 12 gallons of syrup per hour.

And, just in case you didn't know, a gallon of maple syrup is the result of evaporating the moisture from 30 to 50 gallons of sap!

You just might want to drop by some time in March or April and enjoy real pancakes and maple syrup. If you do, you are likely to take a gallon or two home for future use. — Hugh Cosline

MIGRANT HELP

"I hire eight migrants to help in the apple orchard; usually the same men come back year after year. For some years my camp has had hot water, and we are building a new camp that will have flush toilets."

Marion Eygnor

Marion Eygnor of North Rose, New York, is the apple grower who gives this report. A couple of key men come in April, and the remainder in time for cherry harvest.

"Sometimes one or more of the men ask for an advance on their wages while still in Florida, which I send," said Mr. Eygnor. "I try to keep them busy, even if I have to make work for them. For example, they do some thinning of apples. We thin with a chemical spray, but there are so many factors that affect the results (weather, temperature, etc.) that we usually need to do some hand thinning.

"I pay the men a bonus based on the volume of apples picked, assuming they do a good job and stay till harvest is over. It's good business. It brings them back so I don't have to train new workers every year."

Marion Eygnor has 85 acres in apples, 12 in pears, 4½ in sour cherries, and a few sweet cherries. Twelve years ago he had a small dairy, but decided to get out of the dairy business and concentrate on fruit. He sets some apple trees on semi-dwarf stock almost every year.

Where apple trees were once set equal distance from each other, most orchardists now set semi-dwarfs relatively close in rows. This helps spray efficiency, makes picking easier, and tends to increase yield per acre. The semi-dwarfs also start bearing at a younger age.

Because of the recent attempt to boycott California grapes, Mr. Eygnor and I discussed the situation. "I have no objection to minimum wages," said Mr. Eygnor. "In fact, I plan to pay a little more than minimum. However, I understand that there was no strike among the workers in California grapes; the whole problem concerned an attempt by labor unions to organize their workers.

"It seems to me that this sets up a very dangerous situation. Farmers are particularly vulnerable, and past events show that unions pick the most favorable time for a strike, which in this case would be just as harvest begins. A strike at this time would leave many farmers in a very vulnerable position and, in the case of fruit, could easily result in a farmer losing the entire results of a year's work."

I agree with Mr. Eygnor. It seems to me that students and others who are urging a boycott of California grapes are mixing into a situation about which they do not have all the facts. — *Hugh Cosline*

GROWS SUGAR BEETS

"We are milking 50 Holsteins in an inefficient setup, but we hesitate to invest the money in a free stall building. If Clifford, who is in partnership with me, decides to do it, I will go along, but I'm not urging him. In fact, I suggested that we might be able to buy one at a bargain price from some dairyman who tried it and went broke!"

The speaker was Ed Sharp of Byron, New York, who with his son Clifford operates an 800-acre dairy and cash crop farm. In additon to the milkers, they have been raising from 80 to 100 dairy heifers for replacements, both for their own herd and to sell. However, Ed says they plan to raise fewer from now on.

The Sharps grow a considerable acreage of cash crops, including 70 acres of cabbage (some Danish, some for kraut, and some red cabbage.) Thirty acres are in cucumbers for pickles, 80 in wheat, and 60 in sugar beets.

"Next year we plan to grow 100 acres of sugar beets. We like the crop. This year they will go to a factory in Maine, but next year we expect the plant at Auburn will be operating.

"One problem is finding suitable ground for a four-year rotation. We plan to do a little experimenting by planting a small acreage of beets after beets next year. We bought a beet harvester last year, and 50 acres is the minimum to make it pay."

Another relatively-new practice that is being tried on the Sharp farm is direct seeding of cabbage rather than growing plants and setting them. This past year 10 acres of cabbage was seeded direct, and in 1969 eighty percent of their crop will be handled that way.

"We sell a lot of corn . . . around 8000 to 9000 bushels . . . and feed about 2000 bushels."

Before I left, I asked if the partnership was in the form of a verbal understanding or on paper, and the reply was that it was a legal partnership with conditions in writing, which is as it should be. — *H.L.C.*

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NEW BEEF BREED

It's black and white, and meat all over . . .

by J.W. Stiles*

THE NORTHEAST has many natural resources that can be utilized for greater farmer profitability than at present. For example, the million Holstein bull calves born every year in this area present an exciting example of untapped potential profits. Granted that possibly only 500,000 are suitable to grow out for beef animals, we still have the potential of increasing the profits of those farmers who would raise these steers or bulls to live weights of 900-1000 pounds.

Highly competitive industries continually search for ways to use their by-products profitably. These bull calves are a by-product of our milk production. There is considerable evidence that this by-product can give as high a return on the investment as a good herd of dairy cows.

Efficient

Knowledgeable people point out that Holstein steers are the most efficient animals for beef production. One major reason is that they have less fat when finished, and fat requires much more feed per pound of gain than lean meat. These animals produce uniform, attractive steaks and roasts that more closely meet today's consumer demand.

Nearly 30 percent of the people in the United States live in the Northeast. In recent years there have been important changes that make it more favorable to produce beef (particularly Holstein beef) in the Northeast near the point of consumption:

1. People are exceedingly conscious of calories and cholesterol. They are searching for lower-fat foods.

2. We are growing more acreages of corn . . . and with higher yields. Corn silage can be used in the fattening of our conventional beef breeds at a very low cost. Our corn silage yields are very close to those in the Corn Belt.

3. Some four years ago, the railroads reduced the freight on direct shipments of corn from the Midwest . . . at the same time leaving unchanged the freight for carcass beef. This is of direct benefit to the Northeast beef producer when Midwest corn is needed to supplement the amount grown nearby.

4. Research has found ways to feed fattening animals much higher levels of nonprotein nitrogen, namely urea, than formerly thought safe . . . thus substantially lowering the cost of protein. Urea is a substitute for the soybean oil meal which is shipped in from the Midwest.

5. For several years, Midwest farmers have been storing high-moisture shelled corn (ground or rolled) in horizontal silos. Corn with moisture readings from 18 percent to 35 percent can be safely stored. In fact, experience shows that there are less shelled-corn storage losses than with corn silage, due to the former's packing characteristics.

This procedure saves the high cost of drying. The cost of building such a storage is about 10 cents a bushel compared with nearly $1 per bushel for dry-corn storage. In addition, there is a most important "plus" factor in that the ensiling process increases the digestibility of the high-moisture shelled corn by 10 to 12 percent when fed to animals being fattened.

The combination of all these savings mentioned in item 5 may amount to nearly $15 per animal.

6. Calf disease research at the Virus Laboratory at Cornell University and at other institutions have produced vaccines for some of our devastating calf diseases.

Traveled

I have recently had the refreshing and stimulating experience of investigating research, production and marketing of beef by traveling across the country for Agway several times . . . visiting with farmers, bankers, feedlot operators, scientists, farm press editors, USDA laboratory administrators, packers, meat fabricators and supermarket operators. Here's an account of some of my more exciting visits:

In Missouri, William Simpson had purchased some 15,000 Holstein bull calves in Wisconsin, trucked them to Missouri, grew them to 250 pounds, and then sold them all over the West. The men who had fed these steers were enthusiastic over their profitability.

Meat Fabricating

In Kansas, I visited the first meat fabricating plant in the country. This supermarket operator has his own feedlot and packing plant; he cuts the carcass into consumer-size portions, wraps and delivers them daily to each of his seven markets.

He reports a substantial saving over more conventional . . . and less efficient . . . meat distribution practices. It seems to make a lot of sense not to deliver to each supermarket the same kind of a carcass regardless of the consumer demand for high or low-priced cuts. Further, an assembly line such as this naturally requires materially less labor per pound processed than is the case where an individual cuts meat in a supermarket.

In Iowa, I saw one of the most modern packing plants in the country. The new ideas they are using, from purchasing to merchandising, make you realize how obsolete a high percentage of our beef packing plants are today.

Taste Tests

At Iowa State, some of the best and most extensive work has been done with Holstein beef production and taste panel testing. They have shown far greater profits with the Holstein steers than with the conventional beef breeds. Professional taste panels find it very difficult to determine any difference in the beef.

Cornell University has a small retail meat market in connection with their meat research laboratory. The people operating this market have switched from U.S. "Choice" regular beef to Holstein and back again without their customers noticing the difference. For the most part, these customers are critical food evaluators.

In southern California, the Smiths have recently completed a series of slotted-floor structures with room for 10,000 head of Holstein beef. The cattle are given only 20 square feet per animal and are in pens of 30. It is reported that three men are taking care of the 10,000 head! The manure is mechanically scraped several times a day (on a time clock) into a tank and dehydrated. The odor from the feedlot apparently is not troublesome.

California University researchers, under the able leadership of Drs. Lofgreen and Garrett, have developed very accurate figures on energy requirements to maintain and fatten beef. The commercial feedlots that keep accurate records report these research findings are very close to their actual experience in feeding thousands of cattle.

Exclusive Use

A supermarket chain of excellent quality in Los Angeles has used Holstein beef exclusively for several years. The owner reports that he has been able to build volume successfully with this beef . . . and without advertising "meat specials."

There are several farmers in California who specialize in buying Holstein calves a few days old and growing them to different weights. Some of them have nearly 2000 young calves on hand continually.

New Facility

The Clay Center in Nebraska was taken over from the Defense Department by the U.S. Department of Agriculture in 1966. With its 35,000 contiguous acres, it will be the largest meat-animal research center in the world, where meat production will be researched from the soil to the consumer. The staff plans on using twelve breeds of animals in a cross-breeding program, and will undoubtedly contribute a

(Continued on page 27)

While this article was planned to discuss Holstein beef, it should be brought out that there are good opportunities to profitably feed our conventional beef animals on a high-corn-silage program. These animals have the ability to reach a U.S. "Choice" grade on such a program.

The best information now available indicates that Holsteins grow too large to reach a satisfactory carcass quality at an acceptable weight for supermarkets unless fed a high-energy ration. Much research is being conducted, though, that may develop a program whereby corn silage can be fed at least as *part* of the ration to fattening Holsteins.

Another opportunity for expanding meat production in the Northeast is the cow-calf setup, using either beef-breed cows or cross-breeds. There is considerable evidence that green corn stalks can be more commonly ensiled and fed to beef cows, thereby reducing calf costs materially. New machines are in the development stage that will pick and shell the corn, and at the same time chop stalks, cobs and husks.

Another possibility is to use Holstein cows that have lost one or two quarters for raising calves. With the right facilities to keep labor requirements down, it might be feasible for a Holstein cow to nurse three or four calves in one lactation. This type of a cow would bring as much money when sold after the beef operation as when she left the milking herd.

*Vice President Development, Agway Inc.

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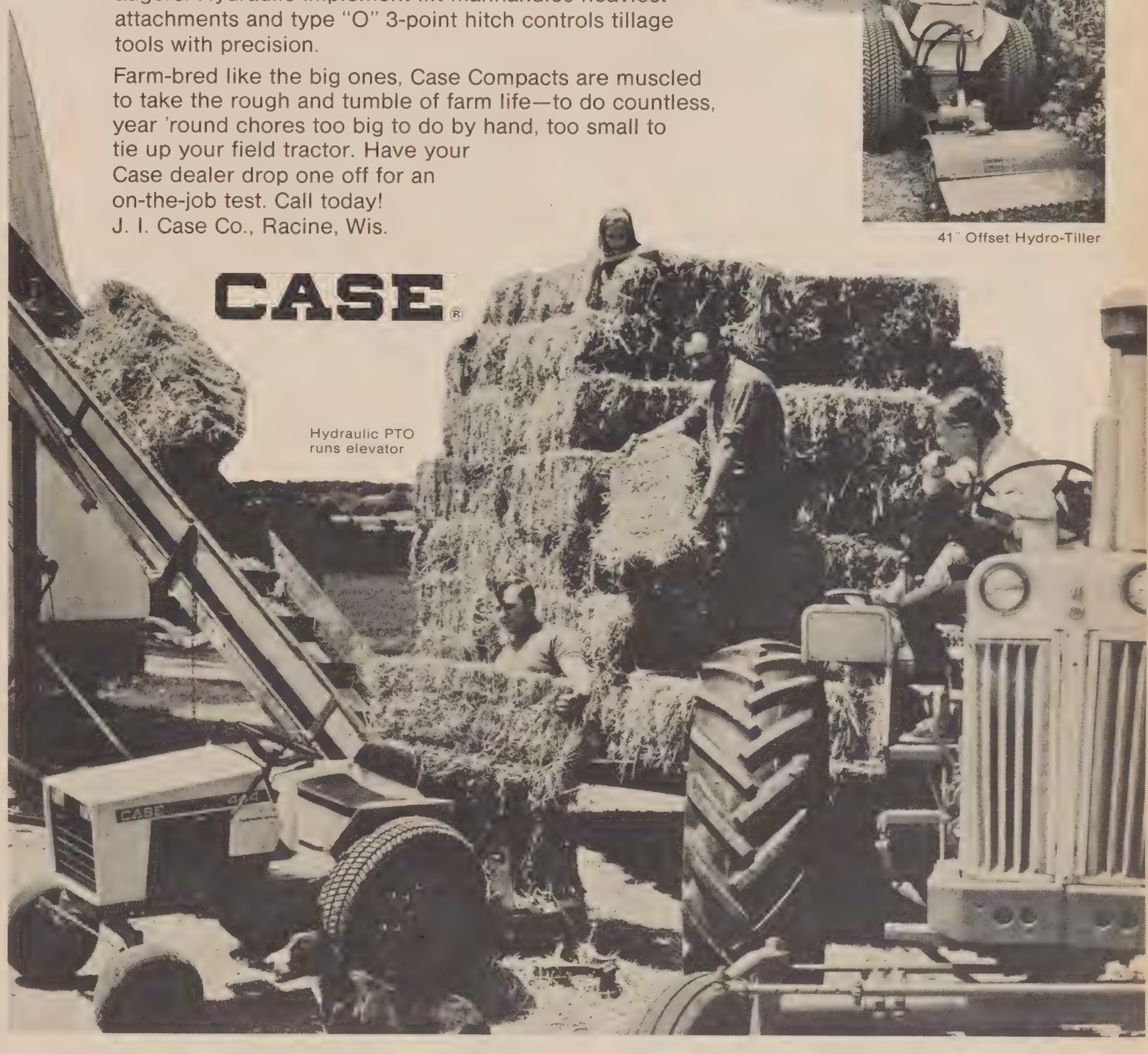

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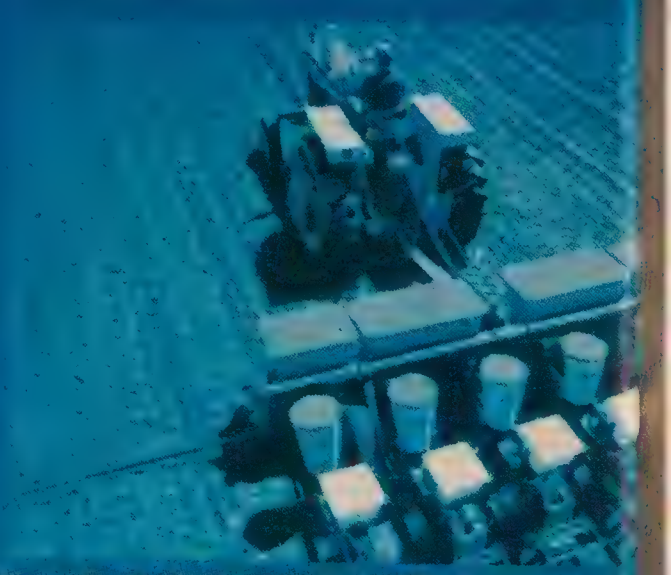

New Ford 320 plants six 30-in. rows. We have cultivators, harvesting equipme to match.

PRETTY PARLOR

The double-6-herringbone milking parlor at Zelson Farm near Fort Plain, New York, is a model of comfort and efficiency. Ceramic tile provides a hard, smooth surface on the floor of the milking pit, as well as totally covering the parlor sidewalls. The ceiling is formed of corrugated plastic such as is often used to roof patios. There's an air conditioner to keep milkers cool in summer, a furnace for winter warmth, and even a television set for entertainment!

Milking equipment is the Zero Concorde . . . featuring a twin-vacuum system that creates no air injection to foam the milk on its way to the bulk tank. Owner Stanton Hudson reports that milk per cow has increased by 500 pounds on an annual basis since the parlor came in use . . . up to a DHIC herd average for the year ending April 1968 of 16,395 pounds of milk per cow. One cow . . . Fed Forbes Ormsby Mutual Robin . . . boasts a record of 30,740 pounds of milk testing 3.8 butterfat in 392 days.

Purebreds

There are presently 117 cows in this all-purebred Holstein herd. For milking, cows are let out of tie stalls in batches of 50 to 55, go into a holding area outside the parlor. A grain ration containing 26 percent protein is fed in the parlor to balance the high-moisture-corn ration fed in the stalls. Milking begins at 4:00 p.m. and 6:00 a.m.; it takes two men 2 hours and 35 minutes to milk.

This parlor features a Zero milker for the cows . . . air conditioning, furnace heat, and a TV set for the milkers . . . even ceramic tile on the sidewalls and pit floor for the milk inspector! Stanton Hudson cleans up.

Corn silage (fed at 40 pounds per cow per day) is stored in a 22×60 silo, HM corn in a 14×50. There were 122 acres of corn grown here in 1968, with 200 acres planned for '69. Roughage feeding also includes 18 pounds of hay per cow per day.

Lead feeding of grain is practiced, but Stanton reports it hasn't helped prevent ketosis. He "eyeballs" the entire herd carefully once a day by walking around the barn in front of and behind the cows . . . and he weighs each cow's milk every night and morning for the first 120 days of her lactation. This way, he detects quickly any health problem that may be developing.

Ketosis

Ketosis has been a problem . . . and Stanton comments that feeding propylene glycol on top of roughage is a time-consuming job with a herd this size. Instead, he injects problem cows with Azium or Prednisolone . . . while in service, he was trained as a medical technician and became familiar with a broad range of pharmaceuticals. An antibiotic usually accompanies these injections, because cortisone materials such as these can mask the symptoms of an infection.

Unlike some dairymen, Stanton does not like rubber mats on platforms . . . believes they cause soft feet, as well as preventing the desirable wearing-off of claws and heels.

Although this is a sizable operation, it's very much a family farm . . . involving Stanton, sons Roger and Wayne, son-in-law William Thompson, and the vitally-important help of their wives. Having once been a construction crew foreman, Stanton has the know-how to oversee house-building as well as barn-building . . . with only family help needed to get the job done.

Charolais—Corey Garey, Jr. . . . field secretary for the Colonial Charolais Association, 11 W. Pennsylvania Ave., Towson, Maryland 21204 . . . reports that a Charolais steer from Green Cove Farm of Avello, Pennsylvania, recently posted a dressing percentage of 70 percent. The occasion was the Eastern National Livestock Show, at which this steer took second place in the Junior Yearling Steer Class.

The Colonial Charolais Association reports that 64 purebred Charolais sold for a record average of $4,677 per head at its 4th Eastern National Charolais Sale.

Dairymen from ten counties and two states (see picture above) attended a recent AI Management School sponsored by the American Breeders Service at Bath, New York. Such training programs are designed to train dairymen to do their own AI work with their dairy herds, sometimes referred to as Direct Service AI. (See page 33 of December, 1968 AA for article on Michigan State research on how farmers in that state are handling DS.)

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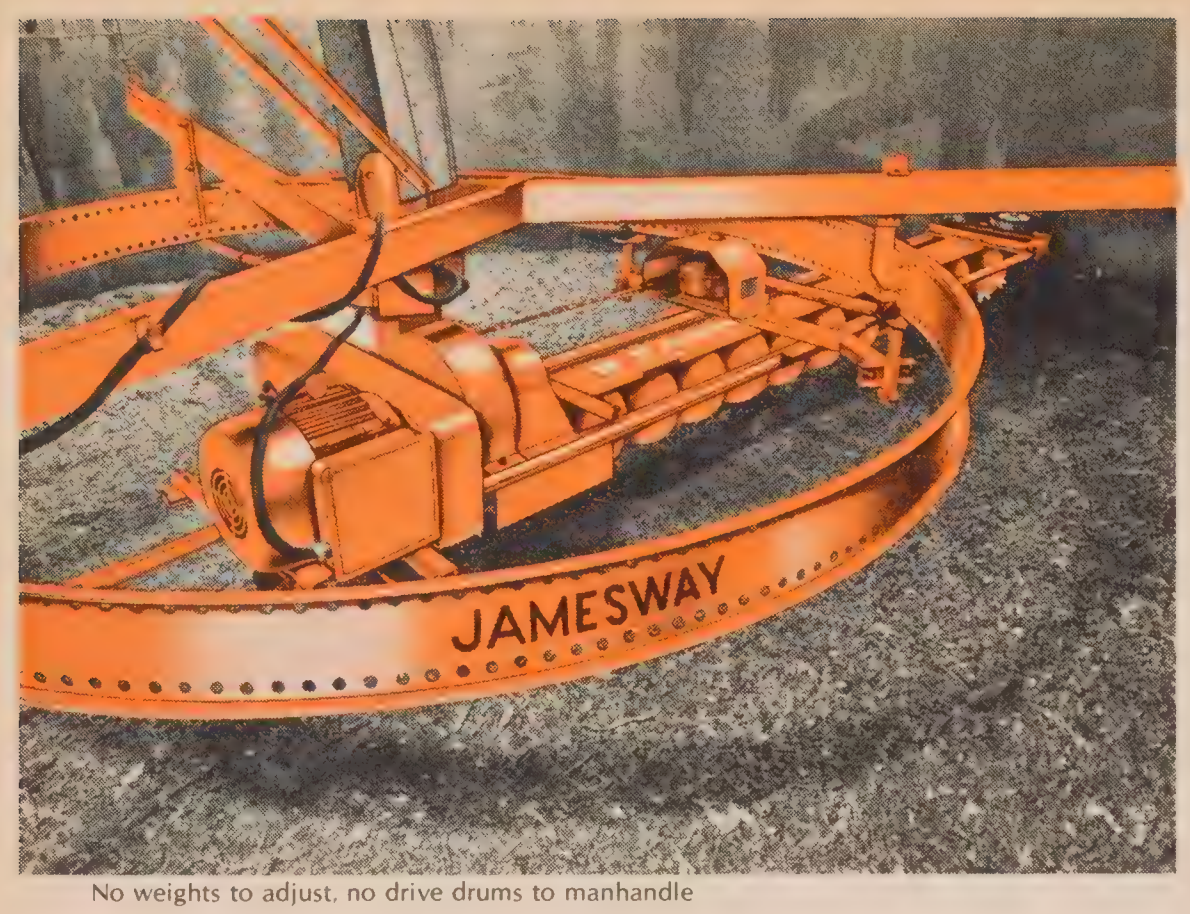

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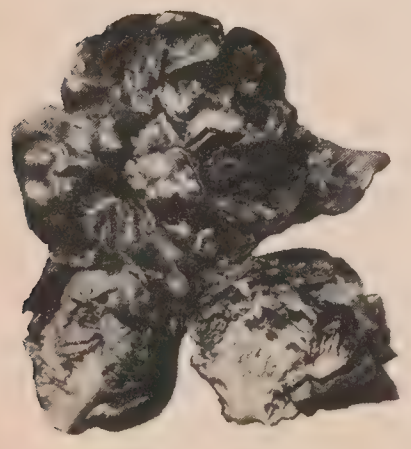
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SELLING LAND

by Amos Kirby
New Jersey Editor

IF YOU are thinking of making a change, don't be in a hurry to accept what may seem like a good price for your land, says a real estate agent. His suggestion is: "Don't say YES too soon."

There is only so much land available in the Northeast. From the experience of recent years, land has increased in value each year over the last decade. Land values in recent years have gone up on the average from two to ten percent per year. That may mean more than the net income from crops harvested.

Have your land appraised by a qualified expert before selling. The fee may seem high, but it is justified in most cases.

LABOR EFFICIENCY

A yardstick for measuring labor efficiency in the dairy barn is supplied by Fred Lorenzo, agricultural agent in Warren County.

On a dairy farm, the best measure of labor efficiency is the pounds of milk per man. Business records of dairy farms in 1967 disclosed that operators with the best labor efficiencies were not only handling more cows per man, but those cows were producing more milk per cow.

On farms where milk production was over 400,000 pounds per man, each worker was handling on the average 35 cows producing over 13,000 pounds of milk per cow. Where less than 200,000 pounds of milk were sold per man, each worker was caring for only 17 cows with less than 10,000 pounds of milk per cow.

There is more to the story. The most profitable units were the larger farms . . . more cows, more crop acres, a larger total investment, and more capital invested per farm worker. Compared to the less-efficient farms, the larger farms had twice as many cows and double the capital investment. This had been achieved through better labor efficiencies, higher-producing cows, and the use of more machinery and equipment.

NEW CROP

Tests on two farms in 1968 indicate that flax may stage a comeback in New Jersey after 150 years.

Fred Fuchs, Belvidere, and John Carson, Moorestown, each grew 10 acres as an experiment, and results indicate that flax of a high quality can be grown in this State. While the results are encouraging, according to James Justin, crops specialist at the Agricultural College, there are problems to be solved.

Flax has two important uses. The straw is used for the manufacture of fine cigarette papers, and the oily seed of the plant becomes linseed meal used in animal feed, and linseed oil used to make paints and linoleum.

MINERALS IN THE RATION

How many minerals do dairy animals need in addition to protein, energy, and vitamins? According to Frank Wright, dairy specialist at Rutgers, the number is 16 for good health and well-being. Plant life requires essentially the same minerals, and the cows' diets never entirely lack any of them.

No need to get excited; no need to rush out and stock up with these mineral elements. Here in the Northeast many may be deficient . . . iodine and cobalt are examples. But the use of a trace mineral-carrying salt will usually provide any margin of safety needed for these minerals. Research has repeatedly shown that trace mineral mixtures do not have to be complex or expensive.

"Better Dairying," (published at Rutgers) suggests a salt plus a calcium-phosphorus to be mixed in the grain where a low-legume forage ration is fed.

With a high-legume forage ration, salt plus sodium phosphate is recommended. In addition, a practical approach is to provide salt free-choice in mineral boxes. They should be placed in a separate compartment or feeder to allow for free selection. If high amounts of legume are not fed, the sodium phosphate can be omitted.

With high-production cows and the management system on many farms, Mr. Wright recommends the free-choice feeding of calcium-phosphorus supplements. Animals who receive little or no grain will also have a better opportunity to meet mineral needs for good growth and later milk production.

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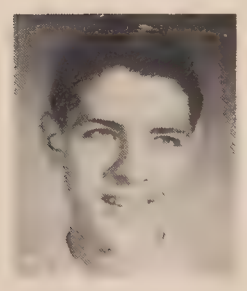

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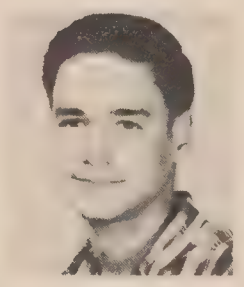

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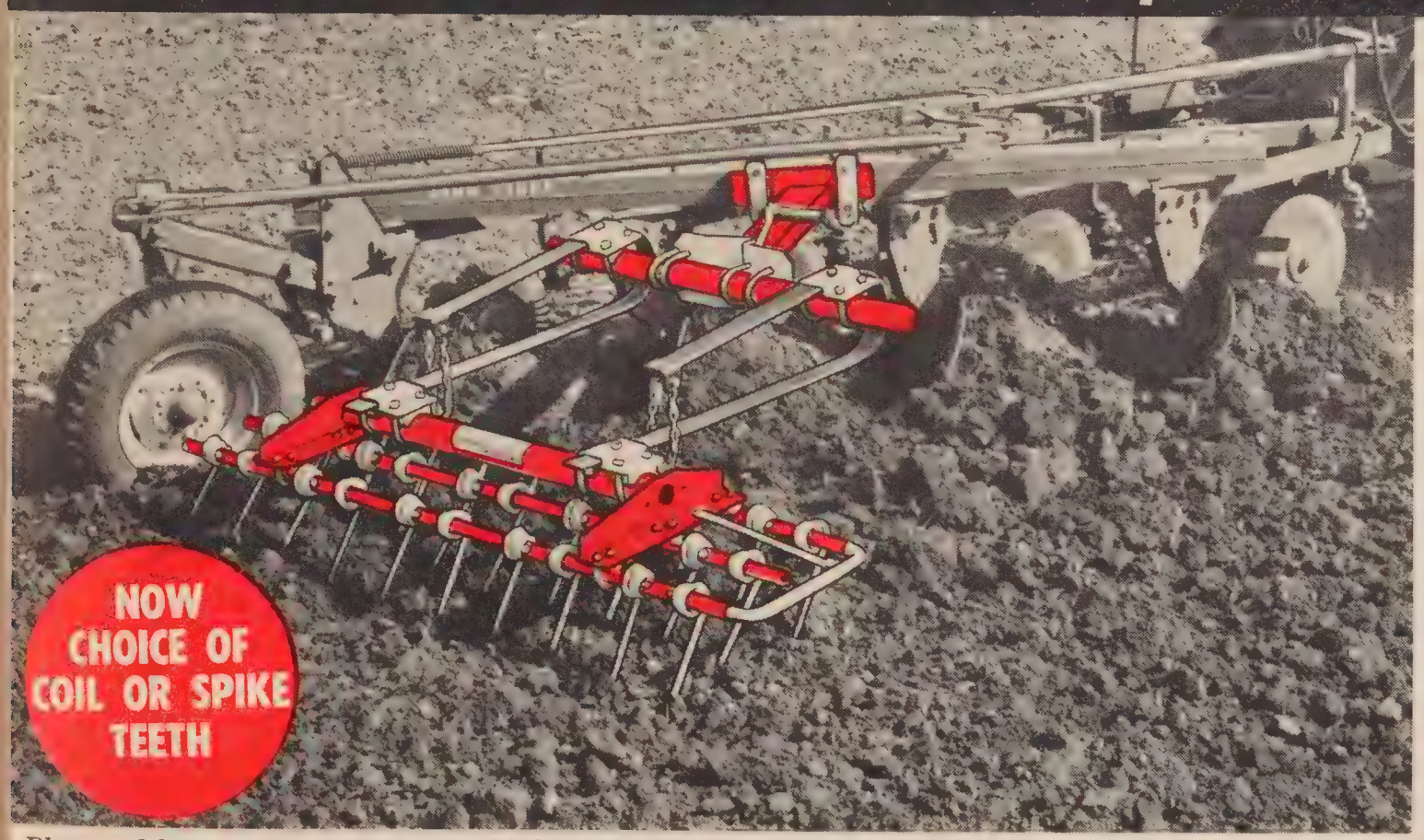

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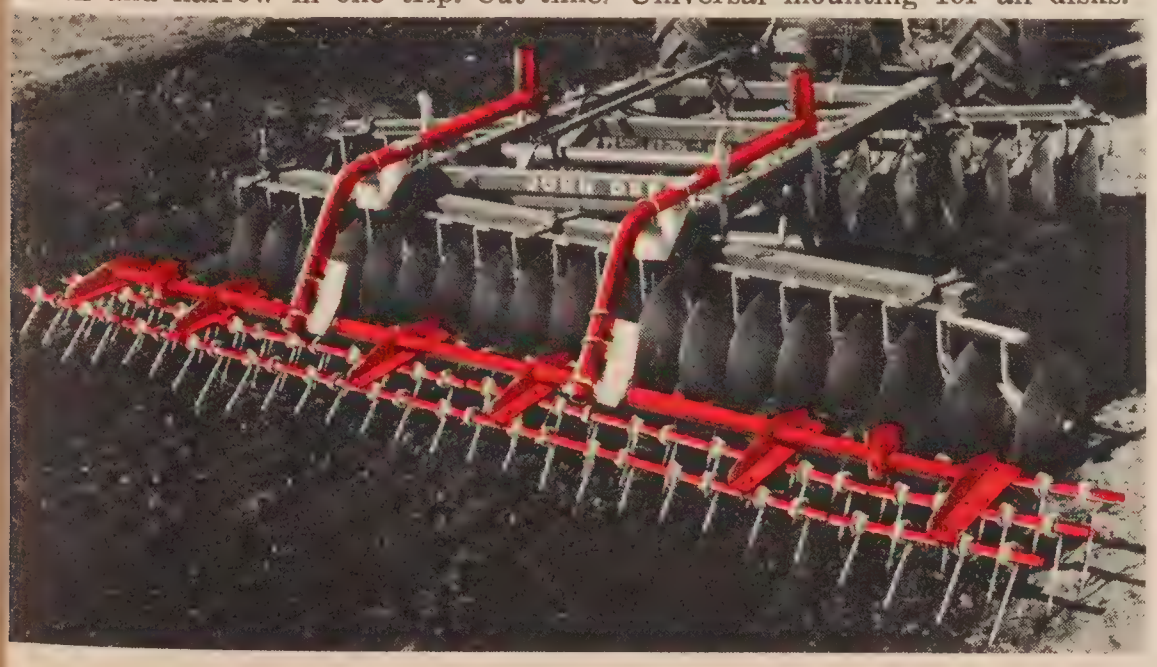

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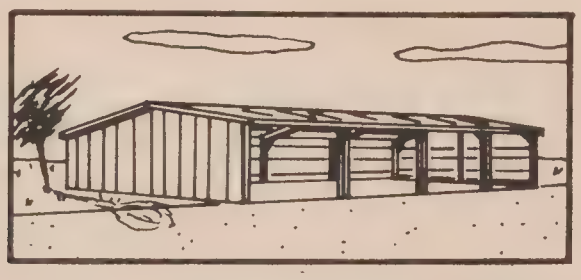

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Mettler . . . . .

(Continued from page 6)

ing; or if the veterinarian leaves without doing anything but the emergency, he is considered as having a "don't give a damn" attitude. This type of client then can't understand why no one hurries to him when he has an emergency!

Almost laughable, but sad for the poor cow, was a client who called at 11:30 a.m., told the office man to tell the vet to "come right away, I have a cow that is having trouble calving . . . but if he can't get here by noon have him wait until four-thirty, because today is the day we go shopping."

Weekend Farmers

Then there is the weekend farmer. He is at his farm only on Saturdays, Sundays, and holidays, and since he is there all routine work has to be done at his convenience. We try to help these people out if they call a week ahead, but some call at 2:30 on a Saturday afternoon, and can't understand why someone can't run right out to castrate bulls or vaccinate heifers.

Many of these hobby farmers (and, sad to say, some of the bigger commercial farmers with loose housing arrangements) don't have any chutes, squeezes, or other facilities for handling animals. A call to bloodtest two heifers for interstate shipment and examine two cows for pregnancy shouldn't take over ten minutes if the animals are confined.

It could take hours if the cattle are in a ten acre lot with nothing but an old barn to chase them into so they can be lassoed one by one. I told one such "farmer" one morning that I'd come and treat the cattle at the regular fee per head, but that I got twenty dollars an hour for cowboy services. He was highly insulted, but hired a lower-priced cowboy from the farm of a neighbor to round up his wild cattle and tie them so we could test and check them for pregnancy.

Hospital Area

No loose housing operation can operate without a "hospital" area where cows can be properly confined for the breeder and the veterinarian. The sick cows should be in this area when the veterinarian arrives; he shouldn't have to wait while you drive them in, or have to help you drive them in. The hospital area should be clean so a veterinarian or breeder can work in it without getting filthy. It should be really accessible, and not behind four gates or fences that have to be climbed each time it is entered.

A call to "see a sick cow" or "infuse a cow after breeding" at most farms means a ten or fifteen minute call. At others, where the owner is too careless to mark the cow, it can mean a half hour trying to figure out which cow is supposed to be treated, or looking all over the farm for someone who knows what is what. A simple note left telling where the cow is and what is the trouble can help so much.

No large animal veterinarian expects to stay spotlessly clean all day, but there are certain barns where I know that all I have to do is step inside the door and I'll look and smell like I walked downwind behind a manure spreader in gear. Loose housing setups don't make filth; it is management. If a farmer has a dirty loose housing setup he probably was dirty in his conventional barn. Filth breeds disease, and you can't expect a veterinarian to cure disease under filthy conditions. You can't expect him to come as eagerly to your place as he would to a nice clean place, either. Think about it!

A veterinarian doesn't expect a farmer to be laughing and full of fun when his best cow is down and nearly dead with milk fever (though the good humor of 90 percent of the farmers I work for amazes me), but some farmers always act as though they were the only ones in the world who ever had a sick cow . . . and some even act as though it was the veterinarian's fault that she was sick in the first place.

Most veterinarians that I know mention these reasons more than any others for wishing to "drop" certain clients. In our practice I don't think we have any clients that are so undesirable that we would refuse to go, but there are still the ones here and everywhere that are the "just can't get a vet when I need one" type. If you ever feel that way, think over what you've read here. It's never too late to change.

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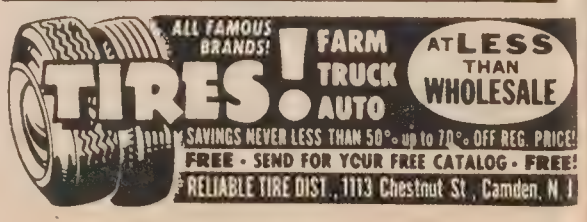

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NEW APPLE GLUE

by C. L. Stratton

IT makes a difference financially whether McIntosh apples are on the ground or in the tree at harvest. Just ask William Darrow, Jr., Green Mountain Orchards, Putney, Vermont, who for the past two years has been experimenting in his orchards with a new plant growth regulating hormone (known commercially as Alar) developed by Uniroyal Inc. Division of U.S. Rubber.

Hot Time

On October 8, 1968, Darrow was packing premium cell-pack Macs for shipment to Miami after what Extension fruit specialists claim was the worst high temperatures of the Mac season in twenty years. Without an Alar stop-drop treatment, these Macs might well have been sold at a substantial loss to the local "drop trade," or headed for the cider mill.

In walking through a solid half mile of choice McIntosh orchard, the ground under the untreated trees on one side of the road was literally blanketed with apples, due to an above-normal drop. Only a few drops were visible under the Alar-sprayed trees on the other side of the road. Darrow estimated the Mac drop under Alar-sprayed trees as 5 to 10 percent; under the untreated up to 50 percent.

Great Breakthrough

Checking through the Darrow orchards, Vermont's veteran Extension horticulturist, C. Lyman Callahan (who has been keeping a close check on Alar experimental tests) said, "Results look good so far. It will help solve a lot of harvesting problems." As he looked throughout the orchard and checked the drops under untreated trees, he added, "Looks like a typical November drop . . . a solid blanket of apples."

Callahan is so pleased about what he has personally seen in the orchards that he claims that Alar . . . referred to as the new wonder chemical by some horticulturists . . . is the fourth great breakthrough in Mac production. He lists these as: (1) original hormones; (2) development of controlled atmosphere (CA) storage; (3) developed cell carton and 3-lb. poly bag; and (4) Alar.

William Darrow packing fancy hand-picked McIntosh for the Miami market.

While some fifty horticulturists and trade paper writers, who had flown and driven in from as far away as Ohio and Minnesota, were checking results between treated and untreated trees, about 50 experienced Negro citrus pickers from Florida harvested the crop. They picked into 20-bushel wooden pallet bins for the short haul to the packing plant at the home farm.

This is a family-owned-and-operated orchard. Profits have been put back into the orchard until today Bill Darrow's Green Mountain Orchards cover nearly 250 acres, extend over five neighboring farms, and are four times the original size. He raises mostly Macs . . . and that's why he is so enthusiastic about his Alar trials.

Although this new plant growth retardant has undergone extensive tests on all types of plants for years, William Darrow has tried it experimentally on Macs for only the past two years. In the summer of 1968 Alar was USDA-approved for use on apples and Concord grapes. It is expected that it will be available in all commercial apple areas in 1969.

New Outlook

The use of Alar has given Darrow a new outlook in regard to harvest. While most fruit growers look forward to a big weekend harvest due to availability of moonlighting local pickers, Darrow's experienced picking crews can work a five-day week. The help can take off weekends if they desire, as long as they meet the daily quota of fruit for the packing plant. At Green Mountain Orchards the apples are packed exclusively for sales, not for cold storage.

When asked by a visitor how long he expected Macs to stay on the Alar-treated trees, Darrow replied, "I'm not waiting to find out." He had the markets and the crews to pick the fruit. Top pickers were picking up to five 20-bushel bins daily, for a good $25 a day at 25 cents a bushel. He claimed that good pickers could make $125 in a five-day week, and take off Saturday and Sunday.

The packing plant-salesroom setup at the home farm includes turntables with a number of girls packing 100 bushels an hour into fancy cell packs, or up to 700 boxes of apples daily. One employee services stores within a 50-mile area of the orchard with a neatly-lettered panel truck.

Darrow pointed out that the neat 3-lb. poly bag is a popular, fast-selling item. While farmers may store apples in boxes, suburban customers claim that a 3-lb. bag of apples is all they have room for in their refrigerators.

New Tool

When Alar is sprayed on apple trees 45 to 60 days before normal harvest, apple maturity is delayed, the harvest period is extended, red color is increased on red varieties, fruit drop is controlled and fruit firmness increased, the incidence of scald is reduced, and water core occurrence is delayed. Applied 10 to 14 days after petal fall, Alar reduces vegetative growth, and induces flower bud initiation on mature trees, promotes return bloom to encourage uniform annual production, controls fruit size, and reduces vegetative growth on young trees.

Dr. F. W. Southwick, head of the plant and soil science department of the University of Massachusetts, refers to Alar as a new tool of the apple industry. Prior to its appearance, he claims that an entire McIntosh crop from a given orchard had to be harvested within a three-week period. Early picking resulted in immature fruit of poor eating quality that also lacked the desired color; delayed picking results in increased preharvest drop losses, over-ripe apples, and poor keeping quality, while short labor supply adds to the difficulties.

Results of studies in Massachusetts shows that Alar extends the normal Mac harvest period from three to five weeks, and delays the softening of the fruit. Although there is a slight reduction in fruit growth rate, a two-week extension in the picking period will add to the color, and most of the depressing effects on fruit size are overcome. An orchard discussion brought out that Alar reduces bruising of fruit, and the effects carry through processing . . . one example, firmer apple slices.

Dr. C. G. Forshey, New York State Experiment Station, Highland, New York, claims that excessive vigor of McIntosh apple trees is a common problem in the Hudson Valley. Over the past three years he finds Alar has shown consistent beneficial results in high-vigor orchards.

The most effective application was made two to three weeks after bloom at rates of 1000 to 2000 parts per million. This resulted in reduced fruit drop, firmer fruit, color improvement, and a reduction in over-size fruit. Fruit size was reduced by 15 percent, but this was not a problem. Part of this loss can be regained, if desired, through harvest delay of from ten days to two weeks.

More Uses Coming

Great things are expected of Alar. It has already been fully field-tested on apples and Concord grapes for the past six years. It increases Concord grape set by as much as 40 percent, and controls excessive vine growth.

By 1970, this chemical is expected to be registered for use on sweet and tart cherries, peaches, and tomatoes. Peaches treated with Alar ripen earlier and more uniformly; sweet cherries ripen two weeks earlier, and tart cherries not only ripen earlier and more uniformly but can be picked more easily via mechanical shakers, with less damage to trees. Alar is considered helpful for mechanical tomato harvesting due to more ripe fruit and less undesirable green tomatoes at the time of harvest.

Costs

At present the cost of Alar is about $6.00 per pound, but fruit growers who have already used it claim that "the advantages outweigh the costs."

Although an Alar application on a single tree costs from 50 to 75 cents (depending on tree size), fruit specialists point out that one more box of apples on the tree will pay for the application. When untreated trees suffer drop losses up to 50 percent, and an additional 10 to 15 boxes of apples remain on an Alar-treated tree, it can amount to a substantial saving.

In the future you will hear more about Alar and how it works on other crops. For the present, on Macs, this is how one fruit expert puts it, "We've got to get ready to sell more Macs."

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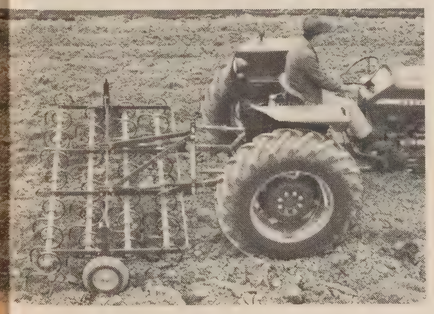

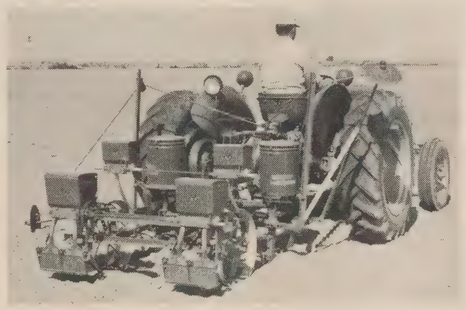

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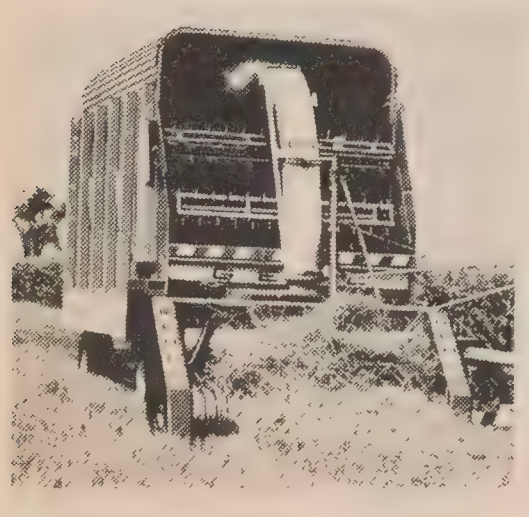

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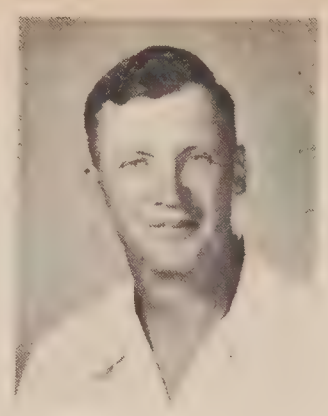

Gayway Farm Notes

by HAROLD HAWLEY

TRIPLE PHASE

It's no secret that industry uses three phase current for their electric motors at fantastic savings. Everyone knows of the greater economy of operation, but possibly some do not realize how much less the first cost is for motors. I am told that in the 2 H.P. and up sizes the new cost of comparable size 3-phase motors may be only about a third what single phase would cost.

There is another aspect to this. Industry replaces motors for various reasons, and good rebuilt 3-phase motors are really inexpensive. We've also been intrigued with the notion that the reduced size and weight would be nice on silo unloaders and other moving equipment.

Of course, the new converters are probably a real step forward, but let's ask a really pertinent question. How large a consumer does a farm have to be to get some consideration for 3-phase current from the power companies? Sure, it costs more to run 3-phase current to a farm, and it probably isn't reasonable to expect that all farms regardless of size and location should get it.

The present policy seems to be to not let farm users in on the action, possibly for fear of setting precedent and creating embarrassment when denying such service to someone else who is farther from town or who would be a smaller user. I suggest that a full-scale review of this policy might be of service to the agricultural community.

HOLD IT A MINUTE!

In addition to a few private migrant camps, there has for a number of years been a large camp run by a farmer's co-op in our county. The camp had about 450 persons this past summer.

I am not an expert on migrant camps, crew leaders, or anything about the whole operation. Naturally, I'm not unaware of the social problems that sometimes are part of the scene. Neither do I choose to ignore the fact that some farmers and some crew leaders do not always measure up to acceptable standards.

Likewise, I'm not so naive as to believe all I hear or read about the abuses of the system. I have too many respected friends who operate camps in which good workers earn decent returns and live in decent surroundings.

All this outburst is brought forth as a reaction to the jubilant tone of the news articles and editorials in the local papers as they announce the possible closing of the co-op labor camp.

It is of no consequence to them that such a closing merely puts 450 folks out of work, or causes them to go to other camps . . . or worse still, encourages them to go to the cities where they have almost no saleable skills. There they will end up on welfare and living under conditions that are actually as bad as some folks claim exist in labor camps.

It seems to me the folks writing these articles and editorials are merely saying that so long as the camp closes here, the problem will go away and no longer be a local problem, and they can then ignore it and let's all be happy again!

Adjustments

Maybe part of the work done by migrants will be mechanized and the hand labor replaced. This has been going on for some time. Many responsible farmers and citizens may have to make some drastic and costly adjustments to a sudden drop in manpower. This just might cause some financial concern to some non-farm people in an area which is still basically farm-oriented.

This is no attempt to solve the problem with a lot of quick answers by an unqualified outsider. I wish a lot of well-meaning folks would hold up a minute and try to become informed before they make their decisions and pronouncements. Likewise, it would be good to think that they were mature enough to look for realistic answers to problems rather than to take comfort and pride in the fact they may have helped rid the area of a labor camp and deprived 450 persons the privilege of summer work.

THE GREAT CIRCLE

As endless as the discussion about the priority of the hen or the egg is the cause and effect of the decline of some rural communities.

We hear much about the decline of the inner city as the suburbs grow and suburban shopping centers attract the shoppers. Naturally, the shopping centers take business and attention and prestige away from the big downtown stores. It is apparent, however, that this they could not do unless they had something to offer . . . be it convenience, location, parking, price, or whatever.

Much less spectacular but of

(Continued on next page)

significance is the decline of the business activity in many rural communities. Where does the business go and why? Let's list a few of the businesses hurting or gone from many villages:

The old **feed mill** is one of the casualties. Some have held on by providing the services offered by the big mill or feed store at a large center. Others have felt they couldn't stand the competition and make the necessary investments in bulk feed trucks, etc. Some have been unable to compete price-wise with a larger mill and store, or couldn't offer all the services. As they lost some business to the larger or more efficient store, their reduced volume had to absorb the total overhead. Sooner or later, this means that the village lost or may lose another business.

The **milk station** had, of course, left many a town, as it no longer served a need. Milk can move long distances from farm to plant by bulk truck or even by can. The loss of the milk station to a village was of less importance in itself then was the loss of local shopping and trading that was a part of the scene as dairymen came to town daily.

The typical village had one or more **coal yards** as part of the main street scene. The power and gas company now meets the fuel needs of the area without being a part of the local business scene in each community's main street.

Natural Death

One of the busy spots in these towns, but now dead as can be, was the **freight station yard.** The loading-out of calves, hay, cabbage, potatoes, and milk, and the in-shipments of all manner of supplies was an activity supplying employment to many. As business and shipping methods have changed, this institution has died a natural death.

Down the street is an empty store where a local **druggist** formerly held forth. Everyone appreciated how nice it was to have a drug store nearby when someone was ill, but they found it more economical to buy at the chain drug store at other times. In spite of his higher prices, the local man finally left the community . . . probably muttering something about lack of support.

His case paralleled that of the **jeweller** who got to fix the watches in his community . . . watches that folks could and did buy cheaper at the bargain house in the nearby city.

Even the **farm machinery agencies** which were two or three to a town have been getting larger and fewer and farther between. Many communities have but one or possibly none. Many of the smaller dealers still provide a convenient local place to buy bolts, belts, batteries, repair links, etc. People mutter about their prices even as they wonder how they can make a living on their volume. Sooner or later they fold, and people will then have to drive ten or twenty miles for the nickel and dime (now 50¢-$1.00) items so necessary to keep a farm running.

The **grocery stores** are no different. They are suffering by comparison with the new supermarket only ten miles up the road. The women make the trek to the big new home of bargains to load up for the week, and just "run down to" the local merchant for the day-to-day items as needed. Their bridge table talk is brightened by tales of how much cheaper steak or detergent or whatever is at the city store. As the cycle continues, another store sooner or later bites the dust and the local community has another boarded-up store front.

The **doctors & dentists** on the local rural community scene have, of course, become most scarce. They serve a wider territory so that many hamlets and villages have no local doctor. Even the undertaker need no longer be a local man but merely someone in the territory. Sad to say, many **country churches** have ceased to do business at the same old stand. Just as in other areas of their lives, people have been able to adjust and find a church of their choice somewhere within driving distance . . . but the importance of the local church and community as a focal point obviously continues to diminish.

I'm not sure how many folks really recognize what's happening. It's so common to hear someone say something about keeping the old town like it always was. Well, it just isn't like it always was and hasn't been for a long time . . . and won't ever be again! It's happened so gradually we just have forgotten how much change has occurred.

With a little more time, it is fairly easy to imagine many of these rural villages having a business district consisting of personal services: a barber shop, a hairdresser, a liquor store, a grocery store-meat market, and the inevitable gas station and garage combination. For various reasons most of the other business places will have left for greener pastures. We may not like it, but we all have a share in bringing about the changes.

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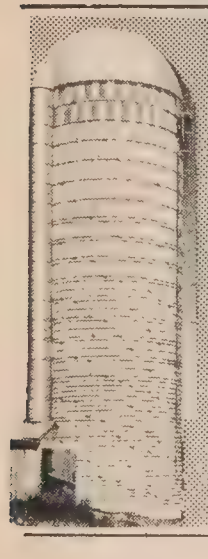

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MILK BATTLE

Please excuse me for not answering your letter sooner. I have been out of my office three to four days per week since August 5th when the New Jersey Office of Milk Industry began a series of hearings.

In June of 1968, New Jersey Director of Milk Control, Dr. Donald R. Nicholson, informed the industry that he was planning to hold a hearing, and asked the industry to furnish him with proposals which he thought should be considered at the forthcoming hearing. On August 5, when the hearings were commenced, we found that certain members of the milk industry had been working with the Office of Milk Industry for many months, preparing for this hearing. Garden State Farms was completely in the dark as to the number of studies which the Office of Milk Industry, together with the Milk Dealers' Institute, had prepared and worked on for many months.

Basically, the study centered around a new method for pricing milk in the future. A so-called formula was devised whereby milk prices would be based on the outcome of certain published indexes . . . indexes which are entirely unrelated to the milk industry of New Jersey.

Not Included

Since Garden State Farms was not in on the preparation of the studies, it required many, many hours of research to go over the thousands of pages of studies in order to determine the possible effects on the price of milk if such a formula was implemented.

It is well known that for several years in the early 1960's Garden State Farms fought the old-line method of milk pricing, which method has been attacked and abolished in almost every state.

During the 1960-1964 court fights, the Supreme Court of New Jersey several times ruled that resale prices of milk in New Jersey must be based upon cost studies and not profit-and-loss statements.

In our estimation, the new proposed formula system of pricing milk would defy these court rulings, and could possibly put New Jersey back into the "horse-'n-buggy" days of pricing milk.

In 1960, Garden State Farms found through its new method of distribution that it could sell milk at 87 cents per gallon . . . 23 cents below the OMI set minimum at that time . . . and still make a profit. It was necessary to appeal to the courts in order to be allowed to pass on the savings created through the new jug system. Finally, in 1964 . . . as the outcome of the Supreme Court decisions . . . the price decreased to 87 cents a gallon and 44 cents per half gallon.

The results of the lower prices are well known to milk authorities, consumers, and farmers alike. Class I sales of milk in the thirteen counties of northern New Jersey, which are under New York Order Number 2, increased for fourteen consecutive months. Farmers gained because more Class I milk was sold, while consumers in New Jersey saved over $50,000,000 per year on their milk bill!

We are opposed to the formula system of pricing milk as now proposed by the Office of Milk Industry. Milk prices, for instance, in July or August of 1969 would be based on the outcome of the indexes of 1968. This, in our estimation, could be very detrimental, because it so happens that 1968 is an inflation year. The price of milk in late 1969 could be forced up because of the 1968 formula . . . when in effect we could be entering a leveling-off or lowering price era at that time. The formula would work too slowly, and too late to be effective. Using actual cost studies such as the New Jersey Supreme Court mandated would be a much more effective procedure.

Witnesses

The contention thus far in the hearings from the testimony pro-

(Continued on next page)

Leadership for 1969 of the Association of Teachers of Agriculture of New York include (l. to r.): Past President Donald Robinson, Sr., Castile; President Robert C. Watson, Lafayette; Vice President Clifford F. Luders, Elma; Sec.-Treas. Bruce Hilton, Hilton; and Officer of Supply Richard Strangeway, Grahamsville.

duced from such distinguished witnesses as Dr. Alpin, Cornell University; Dr. Carncross (retired), Rutgers University; Dr. Markham, Princeton and Harvard Graduate School; Dr. Clark, University of California, bear out that Order 64-1, which was the outgrowth of the Case & Company study . . . and which was recommended by the Advisory Committee of Economics in 1964 . . . has worked very well. In fact, during the present OMI hearings, it was brought out that most of the milk in north Jersey is being sold over the OMI fixed prices. The economists feel that when most of the milk in a market is selling above minimums, price controls are working very well. This, in effect, is allowing the market to seek its own level while at the same time protecting the industry from price wars.

As a result of the study and recommendations of the Governor's Committee of Economists, Case & Company was hired by the State to make a complete analysis of the milk industry. As a result of this study, prices were set for the various points of sale for milk by the OMI when it issued order 64-1.

Order 64-1 was not intended to guarantee every milk dealer a profit. Order 64-1 was to act as a floor from which the price of milk should be based.

In 1964, we (Garden State Farms) recommended a free market with built-in protection such as the Fair Trade Laws which so many of the states now use.

Garden State Farms' position is the same today as in 1964: "The price of milk, as other food prices, should find its own level in the marketplace."

It is our opinion that if price controls in New Jersey are to continue, they must be based on the method as prescribed by the Supreme Court decisions, and that is, simply, on the basis of cost studies which take into consideration size of containers, type of containers, and the method of distribution . . . whether that method be home-delivered or store-purchased milk.

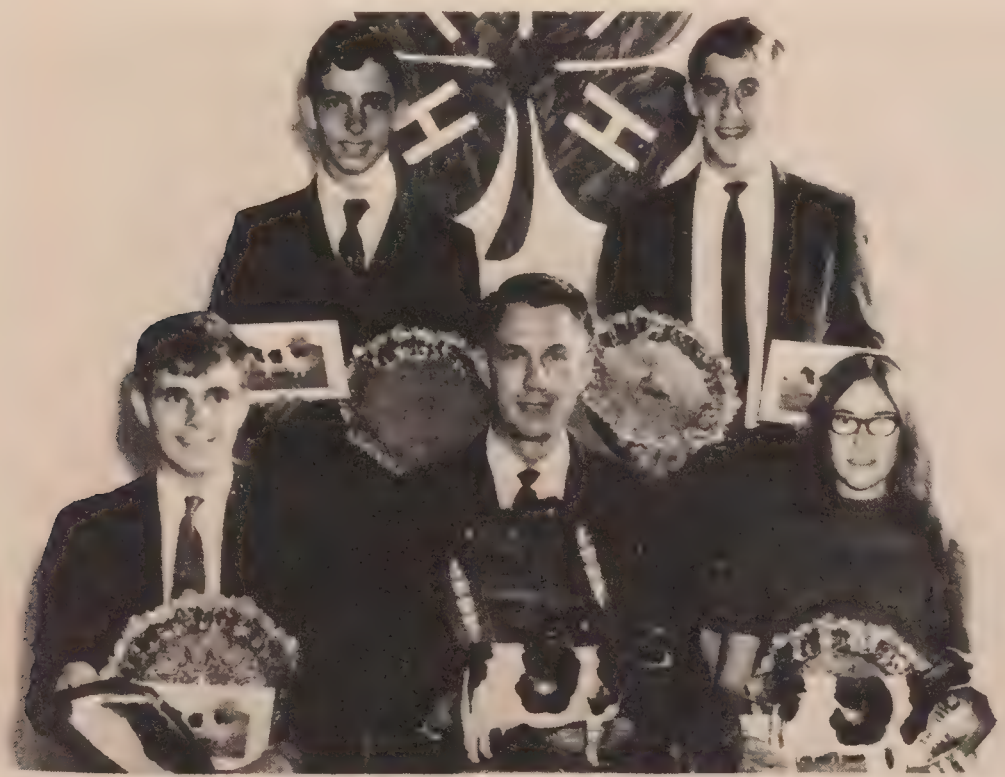
At present, studies show that the reduction of milk dealers in New Jersey is not as rapid as the entire United States, and this in spite of the system which New Jersey has worked under for the last four-and-a-half years. There have been no bankruptcies in New Jersey to my knowledge. There have been mergers and old-line companies selling out.

We feel the industry is in healthy condition at the present time, and do not believe that the present system of pricing should be disturbed for an unknown, untried system as the presently-recommended formula. In fact, it was brought out at the hearings just this past week that, under the formula system, errors could be made . . . either way . . . upward or downward. Either way would affect consumers or milk dealers seriously.

Your recent letter asks for the selling price at which Garden State Farms has been selling its milk. As explained above, OMI Order 64-1 was put into effect in 1964. This order has worked well as a floor under which milk can be sold. Garden State Farms, as well as the rest of the industry in north Jersey, is selling its milk for one cent per gallon and one cent per half gallon above the OMI 64-1 price. As stated often, we are in favor of a low floor . . . if price controls are at all necessary . . . but we do not favor high, rigid, fixed prices as were practiced in New Jersey prior to 1964, and which are still practiced in a few states that retain rigid, fixed price controls.

In your recent letter you also indicate that Garden State Farms has been pushing for lower minimums, while at the same time charging above present minimums. Garden State Farms did not ask nor advocate the present hearings. We simply feel that:

1. Resale price controls are no longer necessary in New Jersey.
2. If resale price controls are continued, they should be based on the Supreme Court rulings. — *Peter H. Sandfort, President, Garden State Farms, Midland Park, New Jersey.*



The New York State 4-H Dairy Judging Team placed first among 36 states competing at the National 4-H Dairy Judging Contest at the North American Dairy Show in Columbus, Ohio.

The Team consisted of: back row, left to right—Mike Hosking, Middletown; William Thompson, Ogdensburg; front row, left to right—William Short, Canajoharie; Professor D. A. Hartman, Coach, Cornell University, and Patricia Gifford, Deposit.

Let's Travel Back With

JOURNEY TO DAY BEFORE YESTERDAY

by E. R. Eastman

The sales of "Journey to Day Before Yesterday" continue to be good because so many who have read it keep telling others about it. Young and old alike get a kick out of learning how their forefathers lived; and youngsters really begin to believe that Grandpa's stories "really happened."

For a copy of this nostalgic book, well-bound and illustrated, send check or money order for $7.30 (New York State tax included) to American Agriculturist, Book Department, Box 370, Ithaca, New York 14850.

With Our ADVERTISERS

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This versatile spreader fits nearly all tractors with three-point hitch, and is an ideal machine for spreading pelleted, granular and semigranular fertilizers and most seeds by broadcast application, directional spreading, or band spreading. Uses include farms, orchards, vineyards, turf work, and ice control.

A new turbocharged 6-cylinder tractor, the 120-horsepower 4520 Diesel, is being built by John Deere, to fill a demand for farm power in the range between the 94-horsepower 4020 and the 133-horsepower 5020 Tractors.

While it resembles the 40-20, the new 4520 is identified as "Turbo-Built" to call attention to major changes in design which accommodate the turbocharger and greatly-increased power.

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New beef . . . . .

(Continued from page 12)

great deal of valuable information.

The wealth of research information being constantly developed is important for selecting new farm enterprises in the Northeast.

Changes

It is very clear that the production and marketing of meat animals is in a stage of rapid transition. Under such conditions, it is entirely possible that regions outside the traditional meat-producing areas can take advantage of these technological improvements. We well remember what happened when broiler and egg production went through rapid changes . . . and the South enormously enlarged its production of these products.

Granted, there are many areas of knowledge that need further exploration in the production of Holstein beef. For example, how can the producer secure a share of the extra profit a supermarket has in retailing a Holstein carcass?

There is considerable evidence that a supermarket has $25 or $30 more profit from a 600-pound Holstein carcass, as compared to that of a conventional beef breed. About half of this is from our present USDA grading specifications, which usually rate a typical Holstein steer as U.S. "Good," in spite of the fact that this meat is practically identical with U.S. "Choice." The other approximate $15 profit results from the improved cutability of a Holstein carcass, with less fat to be trimmed and discarded.

Financing

Financing steers in the Southwest and Far West is well established . . . while in the Northeast this probably will be difficult for some time. It is interesting that finance organizations in the Far West consider a steer similar to grain in storage. Commonly the banks will loan a farmer the cost of a feeder and then advance him funds for feed and other costs until the animal is marketed.

Certainly one of the great possibilities in the Northeast is to store our high-moisture grains . . . ground shelled corn, barley, sorghum, even wheat . . . in horizontal silos. It is likely that there might be as much as a $15 saving per steer by this procedure with practically no risk. It is an opportunity with high-profit potential.

The possibility of having cattle on slotted floors appears to be a major step forward in feeding beef cattle. It is quite possible that the cost of housing per animal can be in the range of $70 to $80, including the liquid manure storage and feed bunks.

I plan to keep close watch of slotted-floor structures in Nebraska, Iowa, and northern Indiana . . . all open to the south and uninsulated. The experience with the ones in Nebraska and Iowa for the past two or three winters is favorable.

Guidelines for the production of Holstein calves and steers have yet to be developed. These need to be specific and clearly understood.

Beef fattening under the conditions that have previously existed in the Northeast has not given as good a return on the investment as other enterprises, such as dairy. With present information and experience, there seem to be sound reasons to believe that some of these meat-producing operations can be competitive with dairy and other common farm enterprises in the Northeast.

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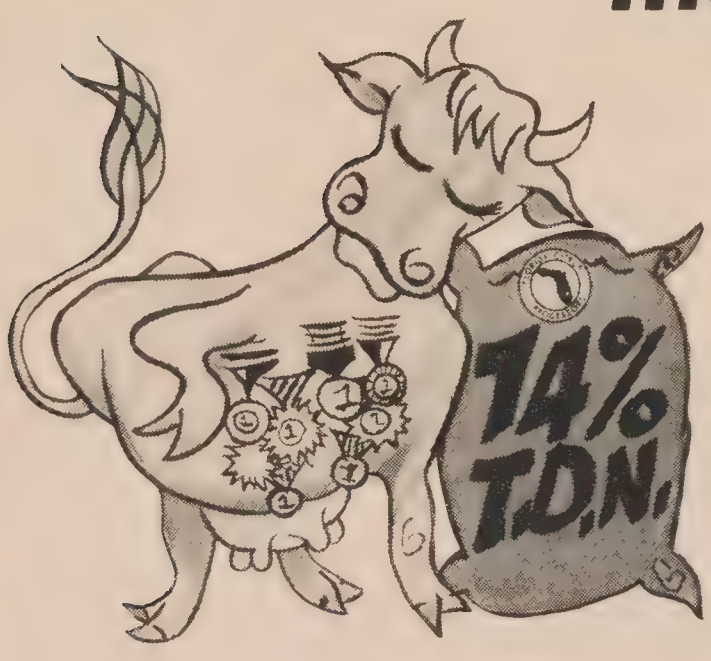
the sunshine feed



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Snapped Corn	8.0	3.0	2.4	10.6	64.8	67.8

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Dates to Remember

Jan. 4 - New York Hereford Annual Meeting, Trenholm East, just off the New York Thruway at Victor.

Jan. 4-9 - New York State Nurserymen's Garden Living Industries Convention, Kiamesha Lake, N.Y.

Jan. 6-8 - New Jersey State Horticultural Society, Sheraton-Deauville Hotel, Atlantic City, N.J.

Jan. 8-9 - New England Fruit Growers' Annual Winter Meeting and Trade Show, Highway Hotel, Atlantic City, N.J.

Jan. 8-10 - Annual Banquet, New England Farm Electrification Institute, University of Vermont, Burlington, Vt.

Jan. 8-10 - 23rd Annual Northeastern Weed Conference, Hotel Commodore, New York, NY.

Jan. 11 - New York State Beef Cattlemen's Association Annual Meeting, Diplomat Restaurant and Lounge, Utica, NY.

Jan. 13-15 - Cornell Agricultural Waste Management Conference, Hotel Syracuse, Syracuse, N.Y.

Jan. 13-17 - Pennsylvania Farm Show, Farm Show Building, Harrisburg, Pa.

Jan. 15 - New York State Agricultural Society Meeting, Albany, N.Y.

Jan. 20-24 - Beef Cattlemen's Short Course, Cornell University, Ithaca, N.Y.

(Continued on page 28)

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Food For The Spirit

by Robert Clingan

Preparing Ourselves for

LIFE'S DEMANDING MOMENTS

An earthquake struck a western city. Many of its public buildings were reduced to shambles. A commonsense viewpoint would suggest that many of these structures were open auditoriums in schools, theaters and churches . . . where partitions did not lock the walls of the buildings together.

Other buildings with small rooms and many partitions lost outer walls. They looked like the doll houses in toy departments at Christmas time. Some were reduced to rubble.

Further examination showed that these public buildings that should have stood the stress and strain of a major earth tremor would not have toppled but for graft and corruption in the building industries, and political collusion.

At the time of the earthquake some people with a religious bent to their thinking that ruled out natural law said, "This is the judgment of God!"

It was judgment day for that city. The moral failures of building contractors, school boards, the corruption of elected officials, and the indifference of the public, all were brought to judgment on the day of the earthquake.

A Parable of Life

This experience of a city is a parable of life. So often the moral failures of a lifetime are revealed in the demanding crises of a moment. This is one meaning of the much-used phrase, "The moment of truth." At this point the individual, the family, the community, or the nation discovers it has shortchanged itself, has written checks against life with no deposits on which to draw.

To our best moments of insight and worship we are called to those qualities which have a survival value. They make life strong, and build it up from within. They make us able to stand up under or recover from the shattering earthquakes of personal experience.

This is what Jesus meant in the parable of the house built on sand and the other anchored to rock. The house on sand fell under the wind and rain and flood, and great was its fall. Apparently it was built well, but on faulty foundation.

The house built on rock stood up to the same kind of wind and rain and flood. It stood firm because it had a rock foundation. This, said Jesus, is the life of a person who lives according to my teachings.

How well prepared are each of us for life's most demanding moments?

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Dollar Guide

For The Northeast Farmer

ECONOMIC OUTLOOK for farmers in Northeast looks unusually optimistic for 1969. Milk prices are at all-time high, cull cow prices strong, and feed costs low. One uncertainty is whether Federal order milk pricing levels (set until April 30, 1969) will be continued ... and whether Federal support prices at 90 percent of parity will be in effect after April 1. Likely that milk-feed ratio won't be quite as favorable in last half of '69.

Egg prices in the first half of '69 are due to average 3 to 4 cents per dozen higher than the first six months of 1968 ... about the same during last half of '69 as they were June-December of 1968.

NEW YORK FARMERS ... There is a five-year real property tax exemption on certain new or reconstructed buildings essential to the operation of agricultural and horticultural lands ... if they're completed after January 1, 1969. The exemption is granted only on application filed by the owner of the structure prior to taxable status date ... check with your assessor for details.

ALREADY, crystal ball gazers are predicting what Nixon will do about farm programs. Consensus is: no fast change, probably some limit on government payments per farm, eventual tapering off of paying farmers for NOT producing, perhaps a big land retirement scheme, law to end tax-loss farming by non-farm businessmen in order to gain income tax advantages.

GOOD FARM RECORDS have always been a chore to keep ... even though most farmers recognize their potential value. There are several accounting systems available now that take the drudgery out of the job ... such as Agway's "Profile Service" and New York State Farm Bureau's "Freddie Computer," as well as programs supervised by specialists at various colleges of agriculture.

One of the most profitable New Year's resolutions you could make would be to get in one of these programs ... or to use more thoroughly the business analysis figures available if you're presently involved.

USDA 1968 YEARBOOK is titled "Science for Better Living." If your congressman can't send you a free copy, it's available for $3.00 from Superintendent of Documents, Washington, D.C. 20402.

Dates to Remember (Continued from page 26)

Jan. 21-23 - New York State Horticultural Society 114th Annual Meeting, with New York State Vegetable Growers Association and Empire State Potato Club, War Memorial Building, Rochester, N.Y.

Jan. 21-23 - 6th Annual Cornell Ruminant Health-Nutrition Conference, Cornell University, Ithaca, N.Y.

Jan. 22-23 - Dairy Farmers Seminar, University of Massachusetts, Amherst, Mass.

Jan. 24 - Market Milk Conference, Rutgers University, New Brunswick, N.J.

Jan. 27-28 - New York State Holstein-Friesian Association Annual Meeting, Kiamesha Lake, N.Y.

Jan. 27-Feb. 2 - New Jersey Farmers Week.

Jan. 28-30 - New York State Horticultural Society Eastern Meeting, Kingston Armory, Kingston, N.Y.

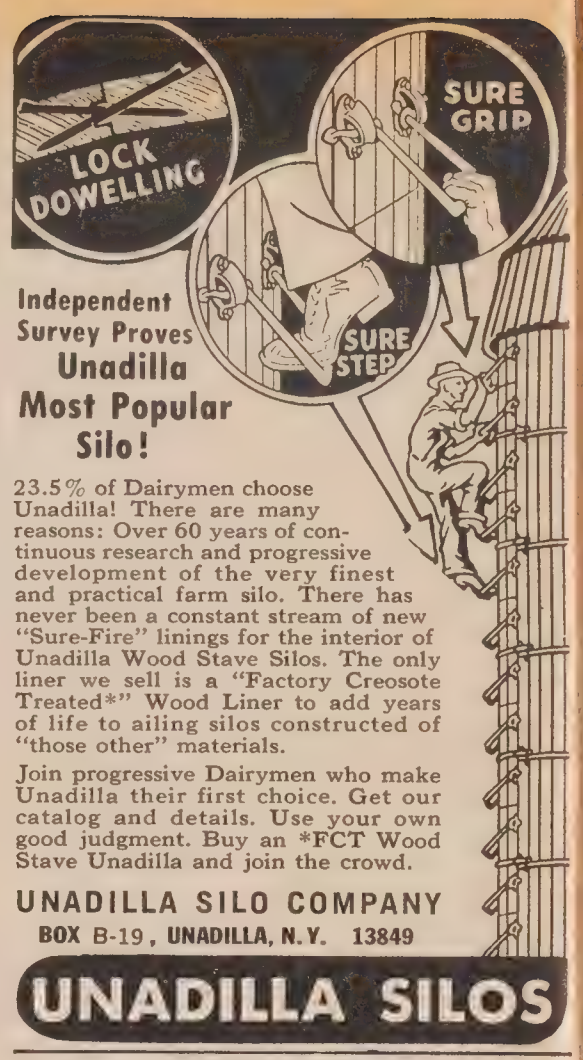
Jan. 28-30 - Delaware Farm and Home Week.

Jan. 28-30 - New York State Veterinary Animal Conference, Cornell University, Ithaca, N.Y.

Feb. 4-5 - American Forage and Grassland Council's 2nd Research and Industry Conference, LaSalle Hotel, Chicago, Ill.

Feb. 5 - Annual Meeting Schuyler County Sheep Breeders Association.

Feb. 5-7 - Cooperative Extension Conference, Cornell University, Ithaca, N.Y.



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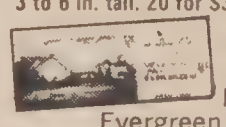

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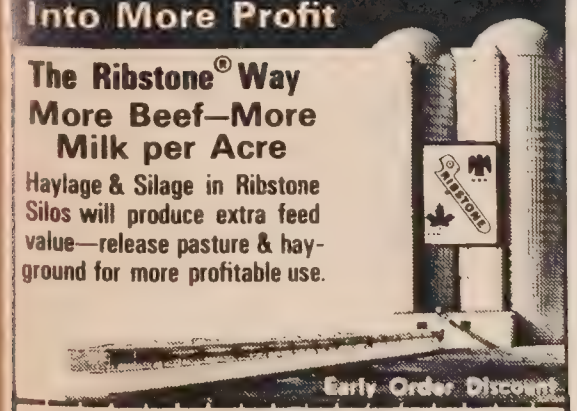

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TRAVEL WITH US IN 1969

So that you can have as much time as possible to plan your vacations with American Agriculturist and Travel Service Bureau this year, we are listing the tours we have already arranged for 1969. Brief descriptions are given for these tours. This is not our complete travel program, and we will tell you about additional tours, as dates are established and itineraries completed. Study the following list and start making plans to go some of the places you've always wanted to visit!

Mexico Discovery Tour (March 14 to April 1) with "something added" for 1969. Besides the traditional visits to Mexico City, Fortin, Veracruz, Xochimilco, Taxco, Acapulco, Morelia, Patzcuaro, Guanajuato, and San Miguel, we have added the fascinating Yucatan Peninsula. Stops will be made at Merida, Chichen Itza and Uxmal, seats of Toltec and Mayan civilization. A stop at New Orleans is also included.

Hawaiian Holiday (April 19 to May 3) traveling by air via the Pacific Northwest to the Islands and returning via California. Spend five days at beautiful Waikiki Beach and also see the "outer islands" of Kauai, Maui and Hawaii. If you want to visit Hawaii in the spring, come with us on this fascinating tour.

American Heritage Almanac Tour, April 27 to May 8. Truly a wonderful trip through the pages of history and the heartland of our American Heritage. Philadelphia, Pennsylvania Dutch country, Maryland, Virginia, Williamsburg, Jamestown, Yorktown, Mt. Vernon, and Washington are all on the itinerary. For additional beauty, we will visit Luray Caverns and travel the lovely Skyline Drive.

Alaska Cruise — Canadian Rockies Holiday, June 1 to 18. Our group will travel by Empire Builder and Panorama trains to and from the Pacific Northwest, then cruise for 8½ days aboard the SS Prince George to Prince Rupert, Juneau, Skagway, Wrangell and Alert Bay, tide and weather permitting. We also sightsee in Seattle, Victoria, Vancouver, and spend two days at glorious Jasper Park in the heart of the Canadian Rockies.

Eastern Canada, Saguenay and Bermuda Cruise, July 12 to 25. 13 days aboard the SS Homeric. Sailing from New York and calling at St. Pierre (French island off coast of Newfoundland), Quebec, Montreal, the Gaspe Peninsula and Bermuda, with a cruise on the Saguenay River. An unusual and fascinating itinerary on a beautiful ship.

Heart 'o the West Holiday, August 2 to 26. The West holds some of the most interesting and beautiful places in our great land, and we have included most of them in this tour. The Black Hills, Yellowstone National Park, Grand Teton National Park, Salt Lake City, Bryce Canyon National Park, Zion National Park, Grand Canyon, Royal Gorge, Colorado Springs, and Denver are just some of the points we will visit. Don't miss this one!

Alaskan Holiday, August 10 to 23. See our 49th State, the last American Frontier in depth. Side by side, you will see log cabins and skyscrapers, dog teams and jet aircraft, oldtime trappers and geiger-equipped geologists. Century-old glaciers, friendly Eskimos, totem poles, Arctic tundra — natural beauty in a myriad of forms and historic lore are all ready to greet you. To avoid disappointment, we suggest you place your reservation request for this tour as soon as possible.

New England Fall Foliage Holidays (October 3 to 11 and 12 to 20) are repeated again. Last year they were sold out far in advance of departure dates. We know Mother Nature will cooperate with a beautiful show of colors, which in combination with New England's historic landmarks make a most enjoyable and worthwhile tour. Included in the itinerary are Cape Cod, Plymouth, Boston, Portland, Franconia Notch, and other spots too numerous to mention.

Aloha Week Hawaiian Holiday (October 11 to 25) is always popular with A. A. travelers. You will be on Waikiki Beach during festive Aloha Week and will also visit the charming islands of Kauai, Maui and Hawaii. Come to Hawaii with us during Aloha Week. You'll be glad you did.

'Round South America Cruise, October 25 to December 11. The SS Argentina takes us on a 45-day South American cruise, which can't be surpassed. Imagine completely encircling the continent of South America, calling at 14 exciting ports, passing through the Panama Canal and Strait of Magellan — all aboard one of the most modern liners built in America! Truly, this is the vacation of a lifetime.

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Gordon Conklin, Editor
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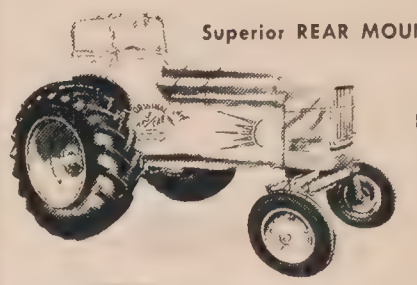

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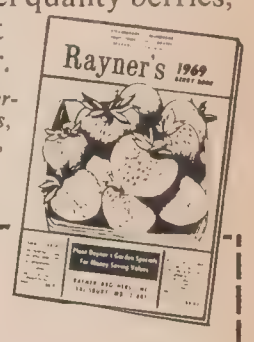

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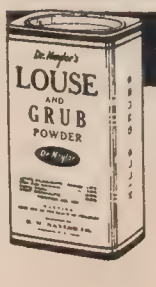

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The following recipes will make good additions to your soup file.

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2 cans (1½ ozs. ea.) cream of mushroom dry soup mix
4 cups cold water
2 cups milk
2 cups diced cooked chicken
1 cup cooked whole kernel corn
2 tablespoons chopped parsley

Gradually blend water into soup mix and stir until smooth. Bring to boil with stirring; partially cover and simmer 3 minutes, stirring occasionally. Add milk, chicken, and corn. Heat thoroughly. Place in soup tureen and garnish with parsley. Serves 6 to 8. Serve with plenty of hot biscuits and marmalade, cabbage slaw, and cherry pie for dessert.

BEAN SOUP (U.S.D.A.)

1½ cups dry beans
7 cups water
Ham pieces or ham bone
1 small onion, chopped
2 celery stalks, chopped
1 teaspoon salt
¼ teaspoon pepper

Boil beans in the water for 2 minutes; remove from heat. Let soak in cooking water 1 hour, or overnight if preferred. Add remaining ingredients. Simmer, covered, until beans are soft, 2 to 3 hours. Remove ham bone and partially mash beans before serving soup to 6. Serve with apple-celery salad, muffins, and baked custard.

NEW ENGLAND CLAM CHOWDER

2 cans minced or chopped clams or
2 to 3 dozen fresh clams, steamed and chopped
¼ to ½ pound salt pork, minced
4 onions, sliced
6 medium potatoes, cubed
Liquor from clams
3 to 4 tablespoons flour, depending on soup thickness desired
2 quarts hot milk
½ to 1 teaspoon salt
Pepper to taste

Fry salt pork in deep kettle until crisp; add onions and fry lightly. Add potatoes and cook until tender. Add clams. Mix flour with little cold water or milk and add to hot milk. Bring to boil and add salt and pepper. Combine hot mixtures and serve to about 10. Serve with crackers, fruit salad, and your favorite cake.

VEGETABLE SOUP

2 pounds beef shank (bone split)
2 quarts cold water
1 package frozen mixed vegetables
4 large stalks celery, sliced
2 medium potatoes, cubed
2 medium onions chopped, if desired
2 teaspoons salt (about)
⅛ to ¼ teaspoon black pepper
1 to 2 pints canned tomatoes

Put beef and water in large kettle, cover, bring to boil, and simmer 2 to 3 hours, until meat is tender. Add prepared vegetables, salt and pepper, and simmer about 20 minutes, or until vegetables are tender. Add tomatoes plus any additional seasonings desired, and reheat for serving. Makes 3 quarts. Serves about 10. Serve with toasted cheese sandwiches and fruited gelatin with whipped cream or dessert topping.

Photo: Campbell Soup Co.

Lancaster County Chowder served with coleslaw and hot biscuits makes an ideal supper for a cold, wintry night. Add cherry pie for dessert, and your family will feel they've had a real feast.

Agway's Food Research

New and better food products by improving flavor, developing variations in form, controlling quality, and working for wider consumer acceptance of these products are objectives of an extensive program in Agway's Marketing Research Laboratory located at Cornell Research Park in Ithaca, New York. Recently I visited this Research Center, observed some of the work done there, and talked with Dr. John W. Dodge, Director of Product Development and Quality Control for Marketing Services.

Potatoes, eggs, and dried beans are among the foods currently under study. French fried potatoes, potato puffs, frozen baked potatoes, and other variations (about a dozen in all) under trade names as Darann, Country Best, and Tater-state are already available in some retail markets.

Fourteen kinds of omelets (Western, cheese, mushroom, Spanish, and others) are presently being laboratory-tested. Some have been market-tested and are available for institutional use, especially in the school lunch program. It is expected that some will be available shortly on the retail market. Frozen cooked chopped eggs are also available for institutional use and are found in the delicatessen-type market.

Work also continues on improving the quality of dried beans for sale to manufacturers for such items as A & P kidney beans and Grandma Brown's Baked Beans. Agway's food research constantly seeks to improve consumer products and holds tremendous promise for farmer and consumer alike.

Kitchen Bookshelf

Family Fare: Food Management and Recipes (HG-1), revised April 1968. Tells the homemaker how to select foods to provide needed nutrients and gives nearly 200 tested recipes with suggestions for well-balanced meals. Send your order (including zip code) with 35 cents to Supt. of Documents, Government Printing Office, Washington, D.C. 20402.

Food Makes A Difference (Cornell Miscellaneous Bulletin 92, July 1968). Shows the whys, amounts, and choices within the various food groups needed for a person to be well-fed. Single copies are free to New York State residents; additional copies, 10 cents each. Send request to Mailing Room, Bldg. 7, Research Park, Cornell University, Ithaca, N.Y. 14850.

Cereals And Pasta In Family Meals: A Guide For Consumers (HG-150). Describes various types of cereals and pasta and tells how to buy, store, cook and serve. Recipes are included for combination dishes and baked products. Single free copies are available from Office of Information, U.S. Dept. of Agriculture, Washington, D.C. 20402.

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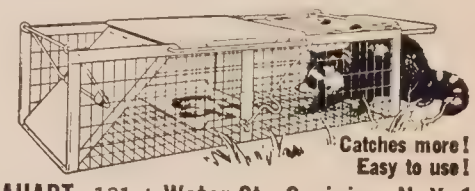

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HAPPY NEW YEAR

DO YOU HAVE . . .

Any idea where **Miss Lilly May Nelson, Wahmeda, Mayville, New York,** can get directions for making "monkey face" lace? Miss Nelson says it was a crocheted lace popular about 50 years ago.

Pieces of Noritake china (especially cups and plates) sold by Larkin Company in the late 20's and early 30's? The china had a flower and fruit design, with a brown and yellow band around the edge, and was made in Japan. This request comes from **Mrs. Walton Bryant, R.D. 3, Honesdale, Pa. 18431.**

An old Larkin Cookbook you would sell **Mrs. Charlotte Lawrence, R.D. 1, Brattleboro, Vt. 95391?** Mrs. Lawrence would also like to know if the Larkin Club is still in existence.

Any of the following Pillsbury Bake-Off Cookbooks: Nos. 1, 5, 6, 10, 11, 12 and 14? **Mrs. Robert Dwyer, R.D. 2, Saegertown, Pa. 16433,** would like to get these books.

Pieces of Noritake china, Inwood pattern, made in Japan? **Mrs. J. L. Fuller, 800 N. Easton Rd., Willow Grove, Pa. 19090,** describes it as having pink and dark blue flowers, light green and blue leaves, with a black design around edge.

A copy of a quilt book containing 118 patterns, published in 1941 by the Lockport Cotton Batting Co? If you do not want to part with your copy, could **Mrs. R. M. Altman, Route 2, Sligo, Pa. 16255,** borrow it for a few days?

Danish Christmas plates with dates prior to 1960? This request comes from **Mrs. R. Reynolds, 9041 Jones St., Omaha, Nebraska.**

A recipe for "Martha Washington" pie? **Mr. Edwin Herig, R.D. 1, Susquehanna, Pa.,** says it was more like a cake than a pie and had raisins in it. Around 1905, it was baked in a large pan, cut in squares, and sold for a penny each at bakeries.

Pattern for a crocheted basket with a large handle for sewing on a bath towel so a wash cloth could be inserted? **Mrs. William Leslie, R.D. 1, Meshoppen, Pa. 18630,** says it was a popular gift item about 25 years ago.

Pillsbury Bake-Off Cookbook No. 16? Please send reply to **Cookbook, P.O. Box 147, Pine Rock Park, Shelton, Conn. 06484.**

New and unusual ideas for knit and crocheted items for a bazaar? This request comes from **Mrs. John E. Jeserski, 518 North West St., Feeding Hills, Mass. 01030.**

Recipes for Buttermilk Pop and Sweet Milk Pop? **Mr. R. Tinker, P.O. Box 83, Stockbridge, Mass.,** would like to get them.

Patterns for "Fair Isle" sweaters for boys, girls, and infants? **Mrs. Vernon C. Thompson, Route 1, Anson, Maine,** says different colored yarns were used, but she has not seen any for more than 20 years.

Thanks!

Mrs. Cyrus Pierce of Putnam Valley, N.Y., received more than 350 recipes for "pork cake" after her request appeared in this column. She wishes to thank each person who wrote her.

Also, Mrs. Alfred Schmedding of Coventry, Conn., thanks everyone who sent her a recipe for Baltimore Pickles. She says she received so many letters that it would be impossible to thank each person individually.

PAINTING TIPS

Ever so often rooms have to be painted, and here are some tips (learned from experience) that can be of great help. Before starting, coat doorknobs, locks and hinges with vaseline; any splashed-on paint will then wipe off easily. Also, fill any cracks or chips in the walls with a mixture made of plain cornstarch and the paint you are going to use. This makes an ideal filler for prepainting jobs.

When you plan to paint two coats, tint the first coat slightly lighter than the final one; this makes it easy for you to tell where you stop for coffee, lunch, etc. Instead of trying to paint registers where they are, remove them, paint, let dry and then replace. You'll get a much better job by doing this because louvers can be done on both sides without any trouble, and it is difficult to do that when they are in the wall.

When through with the paint job, pour parraffin over top of paint, with a string across the top for lifting off parraffin before paint is to be used again. Fill a small nail polish bottle with some of the leftover paint; the tiny brush attached to stopper is ideal for touching up any possible chips. Mark on the outside of can what room was painted with the paint and paint a stripe around at paint-level so you'll know how much is left without having to open the can. — *Louise Price Bell*

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JANUARY GARDENING TIPS

by Nenetzin R. White

Stored bulbs should be checked at this time of year. Dahlias should be slightly moist, firm, and free from rot. You may need to add a bit of moisture to the peat (or whatever you have used for storage material), or to aerate the bulbs and peat. If there is any sign of rot, cut it off with a clean knife and dust all the tubers with a good fungicide, such as Captan, Ferbam or Marlate.

Gladiolus corms should be quite dry. I don't cover mine, but this is because our fruit cellar is cool, with little air circulation. A small amount of barely moist storage media may be mixed with the corms if they seem too dry. A frequent mistake with glad corms is to store too many in one container. Keep the layers rather thin, only an inch or so deep. Look up the special requirements for the storage of other summer flowering bulbs.

House plants may be suffering about now from lack of light. Repotting in a good fertile soil may be necessary, or perhaps just a good application of fertilizer and/or a good pruning will help bring them back. In dry houses, it frequently helps to set pots on a tray of water and pebbles.

Use a magnifying glass to check for insects. One of the worst pests seems to be mealy bugs. You should always check incoming material so as not to infest your other plants. If you find scale or mealy bugs, wash plants in warm soapy water and malathion. It will probably take two or three washings to rid your plants of these pests.

Holiday plants should be fed lightly and frequently, and if it is possible, put them in a cool room (about 50° F.) at night. This way they will last much longer. Try to keep blossoming plants out of direct sunlight, and don't forget that they will need more water while in bloom.

Outdoor plants, especially evergreens, should be "broomed off" so the heavy snows will not break or rip them. Use caution if the temperatures are low, or you may do the breaking!

When the weather moderates, look over your plantings for signs of scale. On a good clear, sunny day when there is no foliage, this is easy to spot. People used to treat scale on any clear day, when the temperature was over 40° F., but we feel much better results are obtained by spraying in late March or early April, using a dormant oil and malathion. Lilacs, euonymus, bittersweet, and magnolias are particularly susceptible to scale. Check them at least twice a year.

Forcing plants or bulbs. If you were far-sighted enough to pot some spring-flowering bulbs last fall, now is the time to bring them into the house. If you did not, you can start some Paperwhite Narcissi or Amaryllis.

Branches of the earliest flowering shrubs can now be brought in for forcing. You may be able to force some of the later flowering plants, but the color will be faded or white. Forsythia and quince force readily and will give you lots of good color. Cut the branches carefully, with an eye to the eventual shape of the plants. Keep these in a bucket of water in the cellar or other cool, dark place. It also helps to sprinkle the tops occasionally.

When the buds start to swell, bring the branches into the house and arrange them in water. By judicious planning, you can have color in your home from now until spring.

By experimenting a couple of years ago, I found that Andromeda glaucophylla and Andromeda polifolia provided delightful evergreen foliage to go with leftover flowers, and they usually spring forth with their delicate bell-shaped flowers. These are white when forced. This year I plan to try forcing some other plants belonging to the Heath family—why don't you try some too?

BLESSING FOR A NEW HOUSE

by Eleanor A. Chaffee

Lord, give this home no more, no less
Than what it needs for happiness.
Not too many earthly things,
Lest they drown the sound of wings;
Not too much money, lest the gilt
Tarnish what the spirit built;
Not too little, lest the heart
Measure all by written chart.

Just enough, Lord, You know best, and
In Thy hands we leave the rest —
Weather that the soul can bear,
Something warm and close to share,
And over all Thy sky to spread
Peace above each heart, each head.

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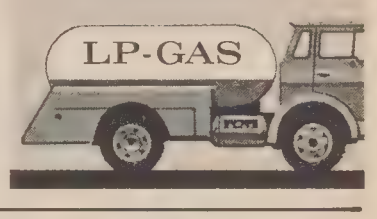

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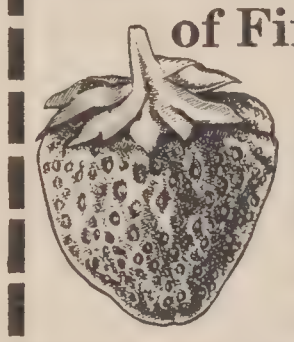

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Ed Eastman's Page

TIME FOR CHANGE

During the recent political campaign and since then all of the many problems with which America is troubled now have been threshed over time and again, with little mention or discussion of the most important one of all . . . the one that underlies and is the reason for most of the other problems. Solve this main one and you will have gone a long, long way toward solving all the others. And that problem or disease is the deteriorating morals of our people.

Many of our books are written in language which would horrify our grandmothers. So would many of the shows on television and in the movies, which reek with violence and sex. We have brought the language and the privacy of the bathroom and the most intimate relations of life into the living room. Sex is discussed as freely among both men and women as a meal of victuals. Nothing is private, and nothing is sacred . . . almost anything goes. It is covered in one word, permissiveness.

We Americans have everything and still we have nothing, because too many of us have forgotten God and the principles He teaches. The courts will not permit even the mention of God in our public schools. How is that for a so-called Christian nation?

But now the New Year and new leadership give us another chance.

It's time for a New Year's resolution which must never be broken. Let us hereby resolve to put God back into our hearts, into our schools, and into this nation!

IT IS GOOD TO BE YOUNG

One of the nicest letters I have received came from a young married woman in Delaware County, New York. I like to think that there are still millions of young farm people like her who like farming and enjoy it as a life as well as a means of making a living. Her letter made me a little homesick for the days of my own youth on the farm. This lady wrote:

"Perhaps it would be of some interest that I can from 500 to 600 jars of jams, relishes, fruits, and vegetables. We always try to get in a good supply of squash, onions, 'taters and apples.

"Weekly I bake bread. We love this wholesome food, and I feel as though we are rich indeed when the fragrant odor permeates the rooms.

"We are young . . . we work hard, together with our boys, four, seven, eight and nine. For youngsters nowadays they have quite a large amount of responsibility helping with the chores. We go to church weekly, try to maintain family worship and play together . . . sledding, ball or just making popcorn and fudge.

"We would like to let you know how very much we have enjoyed your book, 'Journey to Day Before Yesterday.' "I have read most of it aloud to my husband and four sons, as we sat about our smug fire and ate apples."

I like to think that through the columns of American Agriculturist and in my books I have helped to keep alive the customs and way of life of families like this one who have helped to build America.

"Journey to Day Before Yesterday" may be purchased by writing to American Agriculturist, Department Book, Savings Bank Building, Ithaca, New York. The cost of the book is $7.30 including tax.

HE LEFT A LONESOME PLACE BEHIND

When I was a very small boy, I had a cat. He had been in the family a long time and I never was so happy as when I could be with him. But one day my kitty crawled up the cellar stairs to me and became very, very still, and after that I didn't have my kitty any more. Mother said that the kitty had died. I didn't know what that meant. Who does? I only knew that I was lonesome for him for days and days, so much so that after all these years I can close my eyes and see my big yellow kitty and feel a little lonesome.

* * * * *

About four years ago, Belle, Margaret, and I decided to add a kitten to the family group. We already had a little dog.

When we came to get one, we found two in the same litter, coal-black except that the female had a little white spot on her chest. We didn't have the heart to separate them, so we took them both home, named them Dilly and Dally, gave them a back room to live in, a fenced-in yard to play in, a balanced ration, and more love than I can say. They have paid it back a hundredfold.

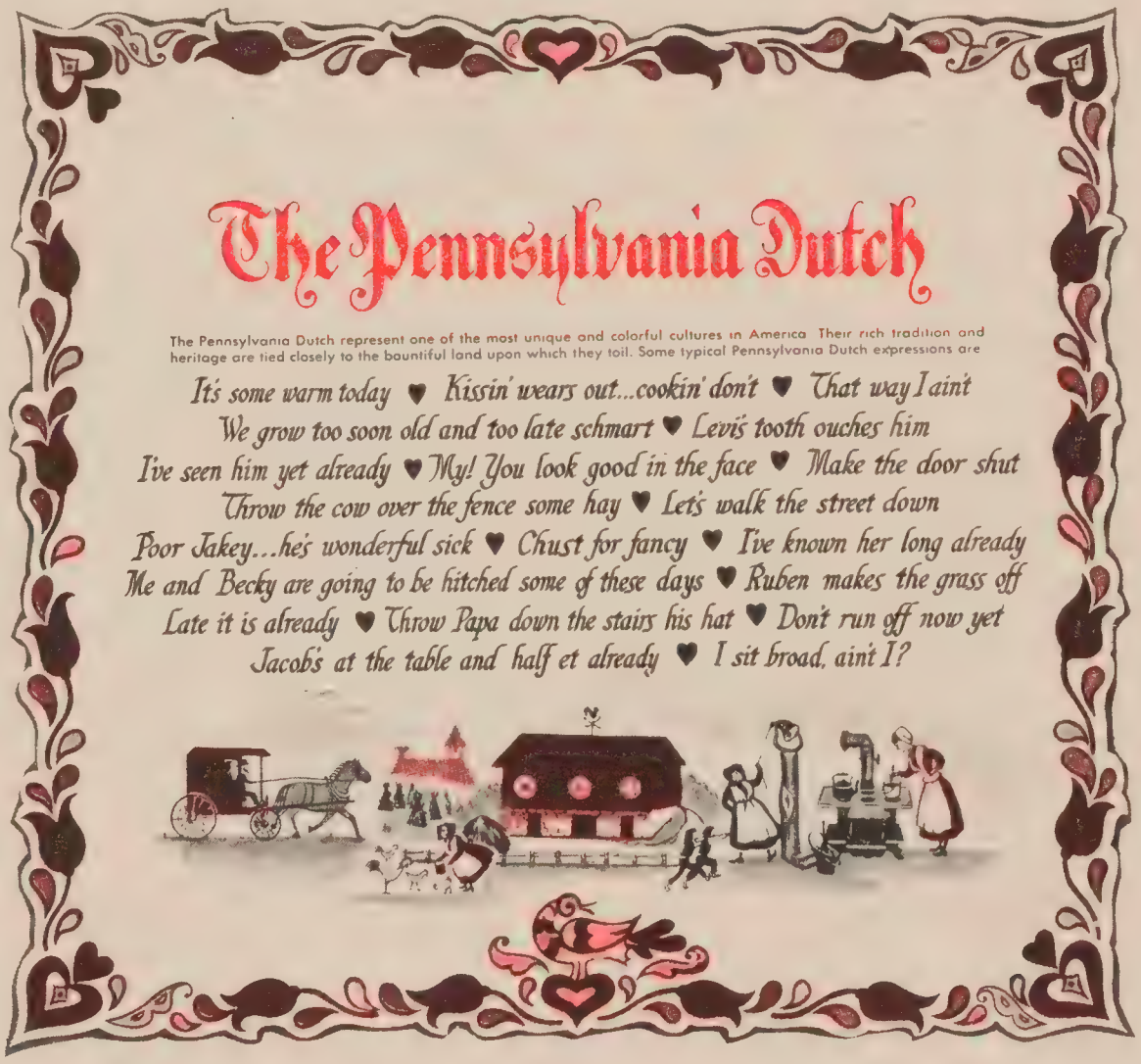
The other evening when I noticed that Dally had not joined the family circle as usual, I went to call him. Usually he came down the stairs with a bounce, but this evening he crawled down slowly a step at a time into my arms, apparently in great pain.

We sent for the veterinarian, but in spite of all that could be done Dally passed on to that land where all good cats go, leaving a lonesome place in our hearts and in the heart of his twin sister, Dilly, left behind.

Like so many animals I have known, Dally never did a mean thing in all his life . . . which raises the question which I have often wondered about. What happens to the spirits of good animals after death? For me Heaven would not be Heaven without them.

As a footnote to Dally's story, you may be interested to know that I asked the veterinarian to perform an autopsy on him. Up to a few days before his death he was apparently a perfectly healthy animal. But the autopsy showed that Dally had a bad cancer which, in a short time, had nearly destroyed his kidneys.

This led the doctor to say emphatically that if a quarter of the money which is spent on such projects as going to the moon were spent instead on research to prevent animal and human disease, we would be much further ahead in our civilization.



A FINE PEOPLE

I got a place mat entitled "The Pennsylvania Dutch" at a nice restaurant called "Depp Well," near Owego, New York. (See illustration on this page).

The Pennsylvania Dutch, especially the older ones, still cling to the different and colorful customs of their fathers, including hex signs painted on many of their barns to keep evil spirits away. We have reproduced for you on this page some of these hex signs which were on the place mats and also some of their sayings.

The Pennsylvania Dutch are good farmers and good citizens.

SON AND FATHER DISAGREE

"This is in answer to your recent inquiry as to whether or not it pays to strip cows.

After years of experience I have concluded that stripping does not pay. My son still believes in stripping. Usually it is the other way around.

If a cow does not milk clean after a short machine stripping, she is a problem cow that either should have her teats lanced or sold to someone who has more time.

I do think, however, that the liners should be in good shape. After a unit has milked fifty cows a day for a couple of months the liners have just about had it."—*T. F., New Hampshire*

EASTMAN'S CHESTNUT

"What's the matter with you?" the wife demanded of her husband. "Monday you liked beans, Tuesday you liked beans, Wednesday you liked beans; now Thursday, all of a sudden, you don't like beans."

THIS CONCRETE STAVE . . . STRONGEST IN THE SILO BUSINESS

Your best reason for making your new silo an Agway-Craine

- 2½ times stronger than ordinary concrete staves, nearly twice as thick (3⅝″)
- Truss constructed with 5 insulating air cells
- All four sides interlock in a fully joined wall

The experience of over 60 years in silo construction has made Agway-Craine the leader. Mail the coupon today and get all the down-to-earth proof that Agway-Craine is best for your farm.

FOR FACT-FILLED LITERATURE, MAIL TODAY

PLEASE SEND IMMEDIATELY:

- ☐ the facts on Agway-Craine Silos
- ☐ literature on Agway silage handling equipment
- ☐ an Agway man to discuss our needs

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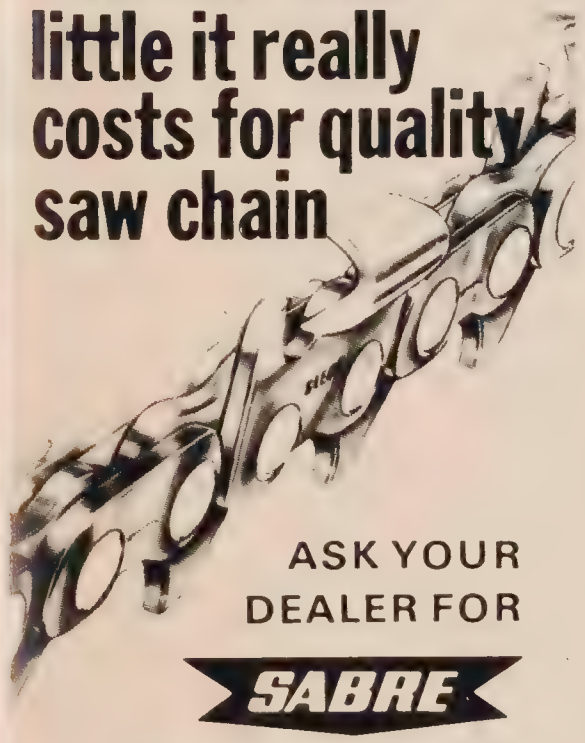
Find out how little it really costs for quality saw chain



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THE PROFESSIONAL-QUALITY CHAIN!

SABRE is the chain that gives you true economy—it costs you less when you buy it, and gives you long life on the job. It is a tough, precision-made saw chain for all popular saws. Sabre is the *only* saw chain with a no-time-limit warranty.

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Write Dept. F for complete literature about Sabre Saw Chain and accessories for your saw.

SERVICE BUREAU

For The Northeast Farmer

SERVICE BUREAU CLAIMS RECENTLY SETTLED

NEW YORK	
Mrs. Harold Garrison, Arkville (refund on kit)	$ 14.26
Mr. Donald Hatton, Afton (refund on insect killer)	15.95
Mrs. Oscar A. Borden, Schaghticoke (refund on subs.)	6.00
Mrs. Edward J. Croteau, Saranac Lake (refund on order)	5.98
Mr. Willard S. Morse, Moravia (payment for eggs)	429.70
Mrs. F. J. Michielsen, Fredonia (refund on jacket)	5.16
Mrs. Joseph Bauernfeind, Jeffersonville (refund on premium)	68.20
Mr. R. L. Parks, Waverly (credit refund)	64.01
MAINE	
Mr. Chas. West, Sr., Bangor (refund on bulbs)	2.98
VERMONT	
Mrs. Edith W. Knight, Bethel (refund on book)	4.20

FIRST SNOW

When the first snow flies, it signals the start of an all-out campaign on the part of fast-talking salesmen who annually induce many homeowners into signing installment contracts for new heating systems at grossly-inflated prices. This is the recent warning of New York State Attorney General Louis J. Lefkowitz.

Typically, a salesman may offer to clean and inspect a furnace, and then so frighten the homeowner by saying the furnace is extremely dangerous that a contract is signed at once for a new furnace. Or, in some instances, he may take the heating unit apart and refuse to put it back in working order unless a repair contract is signed. And rates are far above normal costs.

The Attorney General offered the following suggestions for homeowners who are approached by high pressure furnace men:

Ask to see the credentials of any salesman.

Under no circumstances allow a salesman to dismantle a furnace until a reputable heating firm, known to the homeowner, has checked out the installation and deemed it in need of repair or replacement.

If a salesman says he has been referred by a neighbor, verify this before giving him access to your home.

If the doorbell ringer says he is from a municipal or other public agency and asks to check your heating system, call the agency before admitting him.

Check cost estimates made by a salesman with those of a reputable firm known to you.

Never sign a contract for a furnace installation on the same day the salesman visits you—check on him first.

CAN YOU HELP?

G. Waldo Livermore, Hill Road, Acton, Mass. 01720, wants playing card jokers but no bicycle or common designs. Will return postage.

Address mail to: Service Bureau, Box 370, Ithaca, New York 14850.

Highway Superintendent Badly Injured From Fall

Town of East Otto, N. Y. highway superintendent Mr. William Lincoln received checks totalling $2649.69 from agent Rod Guichard, second from right, of Randolph, N. Y. Looking on is the highway crew, all protected by North American.

Mr. Lincoln also has a beef cattle operation. While storing away the last load of baled hay he accidentally stepped backwards off a scaffolding at the top of a pole barn. Falling to the ground he suffered a severe knee injury which hospitalized him for twenty-four days.

Carrying a combination of North American policies Mr. Lincoln drew medical expense and weekly income benefits in the amount of $2649.69. He gave this letter of thanks:

"Many thanks for the checks which I received from my accident. My family carries a combination of policies with North American Accident Insurance Co. which gives us complete satisfaction. I appreciate the way Rodney Guichard handled my claim in a friendly and prompt manner. I would like to urge other farm families to carry this protection."

William M. Lincoln

OTHER CLAIMS PAID

Norma Ames, Fillmore, N. Y. Fell on ice—broke pelvis	$ 232.14
Louis Rosenberg, Binghamton, N. Y. Kicked by cow—inj. hand	686.11
Alfred Shenk, Machias, N. Y. Auto acc.—inj. neck, shoulders	645.33
Horace Young, Moravia, N. Y. Auto acc.—cut forehead, broke knee	3350.00
Clifford Aikens, Sr., Clymer, N. Y. Fell on ice—injured back	435.02
Alice M. Runkle, Elmira, N. Y. Tripped over cord—inj. wrist, foot	269.03
Floyd Cleveland, Sherburne, N. Y. Electric saw acc.—cut hand	517.02
Robert Wilcox, Cortland, N. Y. Thrown from horse—broke back	1524.61
Celia Kaufman, Delhi, N. Y. Auto acc.—mult. cuts, broke ribs	1168.56
Frank J. Notaro, North Collins, N. Y. Fell on ice—injured elbow	530.00
James S. Hart, Johnstown, N. Y. Fell from moving wagon—inj. chest	642.84
Howard VanOstrand, LeRoy, N. Y. Tractor accident—broke back	957.08
Mary Sweredoski, Sackets Harbor, N. Y. Slipped on ice—inj. knee	107.13
Lowaine Woolschlager, Lowville, N. Y. Fell off sled—inj. side	141.42
David Johnson, Chittenango, N. Y. Pipe slipped—broke ankle	646.50
Donald Bellinger, Dec., Fultonville, N. Y. Auto accident—loss of life	3300.00
Royal T. Benedict, E. Syracuse, N. Y. Cleaning ensilage cutter—inj. hand	499.79
Marjorie D. Kennedy, Canandaigua, N. Y. Auto acc.—cuts, bruises back, chest	707.42
William J. Hough, Fulton, N. Y. Slipped on snow—broke ankle	290.58
Mildred Nichols, Edmeston, N. Y. Fell from moving wagon—broke arm	536.42
William Shypski, Dec., Richfield Springs, N. Y. Auto acc.—loss of life	4200.00
Herbert Gardner, Richville, N. Y. Cabinet fell—inj. leg	186.24
Hubert Brothers, Madrid, N. Y. Hit by power shovel—inj. back, head	199.81
Alexander Urgiel, Jr., Turner Falls, Mass. Tripped over hand truck—inj. leg	549.80
Sophie Hilmeyer, Sprakers, N. Y. Fell off steps—broke arm	$ 898.95
Clarence Elliott, Campbell, N. Y. Wagon tongue fell—broke toe	130.13
Marvin Peck, Cohocton, N. Y. Kicked by heifer—injured hip	192.15
Leon Law, Savona, N. Y. Fell in silo—broke heel	563.61
Norman S. Reddish, Dec., Callicoon, N.Y. Wall collapsed—loss of life	1200.00
Bruce Barnhart, Nichols, N. Y. Elevator slid—inj. back	793.06
Franklin Mott, Groton, N. Y. Barrel exploded—inj. hand, cut head	1018.08
John Armstrong, Freeville, N. Y. Bunted by heifer—broke arm	305.70
Edgar Abbott, Savannah, N. Y. Hit by cabbage—inj. head	389.76
Kenneth Verplank, Marion, N. Y. Fell from roof—broke heel	273.40
Jon C. Wheeler, Mansfield, Pa. Slipped off truck—broke leg	495.05
Lonn Merrill, Sayre, Pa. Cleaning silo—overcome by fumes	378.00
Richard Kingen, Waterford, Pa. Hay mow collapsed—inj. neck	1095.84
Marvin Cook, Guys Mills, Pa. Kicked by cow—broke finger	645.72
Louis J. Warner, Gillett, Pa. Kicked by cow—broke rib	508.66
Richard Perkins, Genesee, Pa. Truck acc.—cut lip, bruise chest	338.80
Ivan Stevenson, Honesdale, Pa. Kicked by cow—broke ribs	175.70
Robert Becker, Asbury, N. J. Shot by hunter—mult. wounds legs	328.56
John Edward Grisman, Blairstown, N. J. Blower table fell—broke finger	318.86
John P. Chobrda, Monmouth Jct., N. J. Pedestrian acc.—inj. arm, leg	1250.00
Charles Kostbar, Englishtown, N. J. Fell off scaffold—broke ribs	118.58
William Lane, Delanson, N. Y. Chainsaw accident—cut hand	357.88
Charles Ames, Fort Fairfield, Me. Fell on ice—broke knee	115.00
Rose Grimes, Chesterfield, N. H. Fell from platform—broke arm	141.27
Lois Havill, Woodstock, Vt. Slipped and fell—broke ankle	297.50

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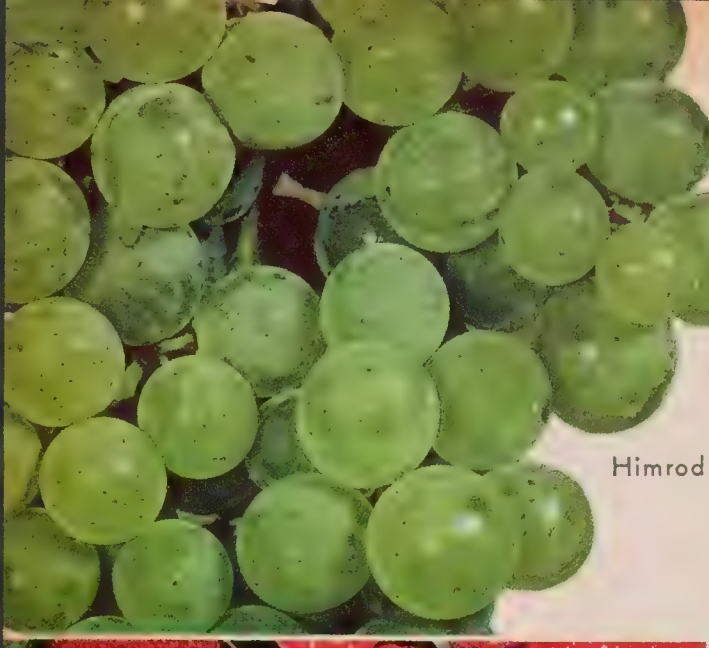
For 89 years, Kelly Bros. Nurseries have been known throughout the East for the finest quality trees, plants, and bulbs. Largest fruit tree growers east of Mississippi River. Many Kelly specialties are hard to find elsewhere.



Himrod

Hardy, Seedless Grapes

Tender, luscious, sweet. Bite into the whole grape, taste its crisp, refreshing flavor, rich winey nectar. Frosty, pale amber. Like California kind, but endures sub-zero in the East. Heavy yield, Kelly's Seedless Himrod created by Geneva Experiment Station.

2-yr., No. 1 Bearing-Age Plants $1.95 each; 2 for $3.75; 6 for $9.95

Concord Blue Grapes

Best known kind by which all others are judged.

No. 1 Plants 2 for $1.75; 6 for $4.75

Fallred Raspberries

Large, sweet, rich red, delicious, plump! All you can eat and a big crop for market in June; more heavy crops from mid-August till November. New canes begin to bear same fall. Fall crops get highest prices. Plant diseases are avoided by cutting old canes after June crop.

2-yr., bearing-age plants 10 for $4.25; 25 for $8.50; 100 for $28.00

Blue Hydrangeas

Large, striking, cool-blue flowerheads, outstanding, always admired. They thrive in partial sun or shade; and the more acid the soil, the deeper the blue! Applying aluminum sulphate makes it easy, even in soil that is not acid. **Large 3-Year Plants $2.95, 2 for $5.75**

Burning Bush

Most popular of all shrubs—the most dramatic addition you can make to your grounds! The brilliant crimson fall display attracts attention from afar. Yellow flowers in spring produce red fruits in summer. Easy to grow in full sun or part shade. Bushy, compact. **1¼-1½ ft. plants $2.95, 2 for $5.75.**

Kelly Dwarf Fruit Trees

Plant This Spring—They'll Bear Next Year

Most Popular Dwarf Apple Trees

Your apples will be bigger, more colorful, more delicious than from old-style, orchard-size trees. In great demand for home grounds, now the preferred trees for many commercial apple growers. You'll have lovely, pink apple blossoms this spring, perhaps even a few apples this year. Some of these trees have already had apples in our nursery. Next season you'll have abundant bloom, more apples; then heavy crops year after year. Kelly's superior dwarf trees take little space, only 15 to 20 feet apart. In orchards, they yield more bushels to the acre. Mature height is 15 ft., can be kept lower.

2-Year-Old, No. 1 Apple Trees
Quick-Bearing, 3 to 4 ft. size, 3 favorite varieties: Red McIntosh, Yellow Delicious, Double Red Delicious
$3.50 each; 2 for $6.50; 10 for $30.00
(For Orchard Quantities, Write for Prices)

Dwarf Pear Trees

Plant this spring and get plump, luscious, sweet pears next year. Mature height 7 to 10 ft., bears bushels of large, tasty pears.

2 yr., 2½ to 3 ft. trees—Bartlett or Clapp's Favorite $3.50 each; 2 for $6.50; 10 for $30.00

5-Star, Long-Season Blueberries

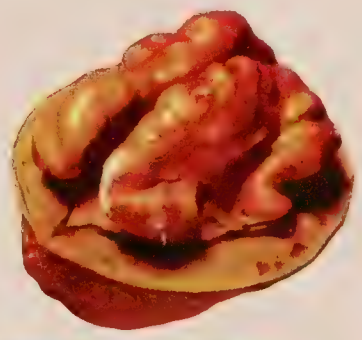
Huge, deep blue, luscious berries u diameter. Perfect for eating out of desserts. Fast seller on roadside sta for freezing. Fragrant, white flowers flaming red foliage in the fall. An harvest of delicious, juicy blueberries, all season. Easy to grow, extreme long-lived plants bear profusely e These 5 best kinds will yield a bountif July 4 to late Aug.: Earliblue, Covil Pemberton, Concord. **3-yr., No. 1, bearin 5 kinds, 1 of each ($9.25 value), $6.95; 10, 2**

Geneva Everbearing Strawberries

Huge, deep red, up to 1½ in. across, till frost! Largest, sweetest, most heaviest yield and most continuous any everbearer! A George L. Slate c Geneva Experiment Station. Superio everbearers. Heavy crop in June an ous harvest all summer and fall. Sup Money-maker on roadside stands.

Husky Virus-Free Plants
12 for $2.95; 25 for $5.00; 50 for $8.50; 10

Most Popular of All Roses!



Peace Rose

Gay, golden yellow buds tinged pink. Huge 5 to 6 in. blooms. Petals edged with pink that deepens to red. Dark green holly-like foliage.

2-yr., No. 1 Plants $1.85 each; 3 for $5.35

3 All-Time Favorite Everblooming Rose

3 best colors, richly fragrant. *Peace* (see a *Crimson Glory*, and pink *Picture*. **Special, on**

English Walnuts

Survives even coldest winters. Grow your own English Walnuts, have plenty for your family and friends, and to sell. Famous Carpathians. For best crops, plant two or more to cross-pollinate.

No. 1, 3-4 ft. trees $4.75 each; 2 for $8.95

Chestnuts, Blight-Resistant (Chinese)

As delicious as good old American chestnuts, even larger nuts. Handsome and fast-growing trees begin to bear in 2 years. For bumper crops, get 2 or more to cross-pollinate.

No. 1, 4 to 5 ft. trees $3.95 each; 2 for $7.75

Tall, Giant Rainbow Gladiolus

All best colors and choice newer kinds. A gorgeous array of red, rose, pink, salmon, orange, yellow, cream, lavender, white. Long-lasting blooms, tall spikes. Have a spectacular garden display, armfuls for bouquets, large 1 to 1¼ in. bulbs.

SPECIAL—75 Bulbs $2; 150 Bulbs $3.75

Giant Camellia Begonias

Begonias make shady spots bowers ty all summer long! Huge blooms in. across in pink, scarlet, yellow copper, and white, mixed. Top-si 1½-2 in. across. **10 Bulbs $2.95; 20**

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Send, at planting time, the Kelly-guaranteed trees and plants marked below.

SEEDLESS GRAPES
☐ 1 - $1.95 ☐ 6 - $ 9.95
☐ 2 - $3.75 ☐ 12 - $19.50

CONCORD GRAPES
☐ 2 - $1.75 ☐ 6 - $4.75

FALLRED RASPBERRIES
☐ 10 - $4.25 ☐ 50 - $17.00
☐ 25 - $8.50 ☐ 100 - $28.00

BLUE HYDRANGEAS
☐ 1 - $2.95 ☐ 2 - $5.75

BURNING BUSH
☐ 1 - $2.95 ☐ 2 - $5.75

ENGLISH WALNUT
☐ 1 - $4.75 ☐ 2 - $8.95

CHINESE CHESTNUT
☐ 1 - $3.95 ☐ 2 - $7.75

TALL GIANT GLADIOLUS
☐ 75 - $2.00 ☐ 150 - $3.75

5-STAR BLUEBERRIES
☐ 5, 1 of each, $ 6.95
☐ 10, 2 of each, $12.95

GENEVA STRAWBERRIES
☐ 12 - $2.95 ☐ 50 - $ 8.50
☐ 25 - $5.00 ☐ 100 - $15.00

PEACE EVERBLOOMING ROSE
☐ 1 - $1.85 ☐ 3 - $5.35

3 ALL-TIME FAVORITE ROSES
☐ Peace, Crimson Glory, Picture - $4.95

GIANT CAMELLIA BEGONIAS
☐ 10 - $2.95 ☐ 20 - $4.95

DWARF FRUIT TREES
$3.50 each; 2 for $6.50
10 for $30.00
..... Red Delicious
..... Yellow Delicious
..... Red McIntosh
..... Bartlett Pear
..... Clapp's Favorite Pear

Choose Your FREE GIFTS (1 for each $7 ordered)
☐ 6 Hardy Amaryllis
☐ 6 President Cannas
☐ 1 Gold Band Lily
☐ 2 Large Phlox

Total Order $
Add 10% postage and packing (minimum 50¢) $
Check or M.O. enclosed $

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FREE GIFTS FOR YOU

For every $7.00 in the total of your order from this page, select one of the special gifts below. For example, if $14 or more, select 2; if $21 or more, select 3, etc.

- **6 Hardy Amaryllis Bulbs** (value $1.35)
- **6 President Cannas** (value $1.95)
- **1 Gold Band Lily** (value $1.50)
- **2 Large Flowering Phlox** (value $1.70)

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913 Maple St., Dansville, N.Y. 14437
In the Fertile Genesee Valley

For The

Northeast Farmer

FEBRUARY 1969

American Agriculturist

and the

RURAL NEW YORKER

These three silos (an Agway-Craine on the left) almost trace the growth of this farm. As corn production expanded, so grew the herd. Each silo is full of corn silage—enough to feed each cow 45 pounds daily for a full year. "There'll be no need to feed green chop next summer," commented Mr. Schofield.

"When land is as expensive as ours, you can't operate profitably with antiquated ideas or equipment.

Agway's Dairy Enterprise Service helps keep us up to date."

Robert Schofield, Westfield, N.Y.

Agway's Dairy Enterprise Service is a continuing force in maintaining the profitability of the Schofield farm.

Through Agway, Mr. Schofield gets sound advice on crop planning, fertilization, feeding, utilization of capital. Agway complete crop programs and recommendations are usually followed to the letter, including such practices as direct seeding of alfalfa, high population in corn plantings, chemical weed control, soil testing and correct fertilization for the desired yield. Corn silage yields typically average 20 tons or more.

Agway buildings and automated equipment make it possible to feed, milk and bed an average of 75 cows in less than three hours a morning. Included in these chores is a thorough cleaning of 400 feet of pipeline and associated equipment.

"Agway's automatic pipeline cleaner saves me a minimum of $750 a year," says Mr. Schofield. "And it has cut our already low bacteria count in half."

Mr. Schofield had been buying a high-energy Agway feed. Agway's computerized Profile report on feed conversion showed him that energy levels in his hay and silage were better than he'd estimated and that he could change to a lower-energy feed costing $7 less per ton. "When you're feeding 20 tons a month, that saving adds up in a hurry. In a single month it more than paid for a whole year of Profile reports," said Mr. Schofield.

Al Gaus consults with Mr. Schofield at least twice a month. "This is great," Mr. Schofield explained. "Al knows all about the current Agway specials on seed, fertilizer, lime and chemicals."

If necessary, Al Gaus brings in other Agway specialists to cope with difficult problems: cows suddenly going off feed for no evident reason, or symptoms of unusual trouble in corn or alfalfa stands.

"To sum up," said Mr. Schofield, "through Dairy Enterprise Service, I've got a business advisor to keep me informed. Through Al Gaus I have access to ideas, knowledge and specialists in every phase of farming."

Want to know more about Agway Enterprise Service? It includes Profile, which provides farmers with a wide variety of computer-generated management reports that not only reveal the month-by-month state of the business, but also provide alternate routes to any given goal. Reports such as Monthly Herd Profiles, Group Feeding Profiles, least-cost feed formulations and others point to more efficient utilization of land, labor and capital.

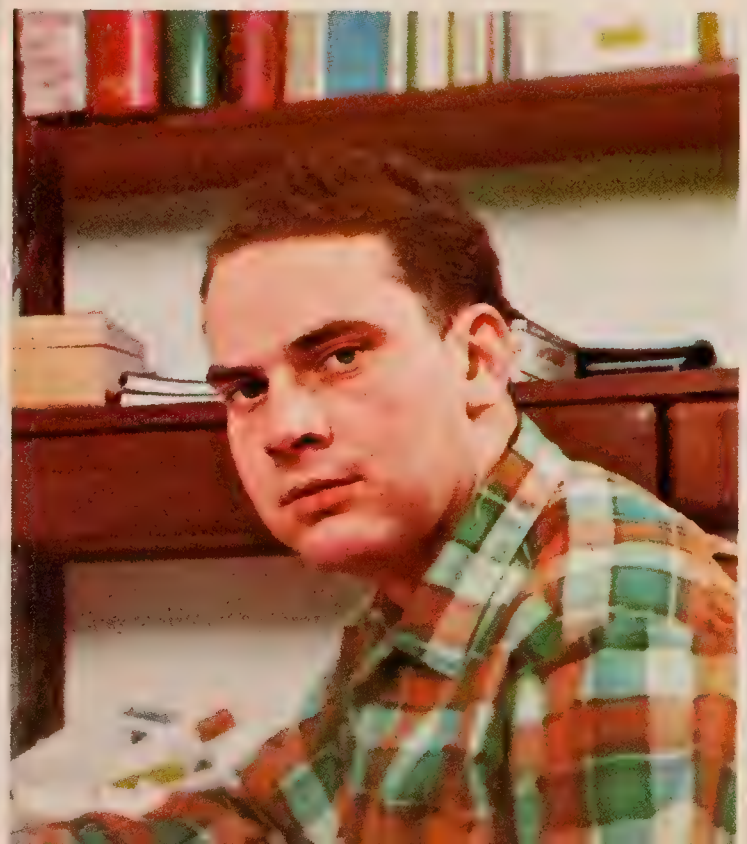
For the fact-filled story of Enterprise Service and what it can do for you, see your Agway store manager or representative or write to N. E. White, Agway Inc., Box 1333, Syracuse, N.Y. 13201.

FARM
ENTERPRISE SERVICES

Agway

Profile Management Services; Feeding Programs; Complete Crop Service; Turn-key Building/Automation Plans and Construction; Herd Health & Sanitation Programs; Members Insurance Service; Complete Petroleum Service.

Dairyman Robert Schofield farms about 400 acres near Westfield, N.Y., in the heart of grape country. His registered herd averages 16,000 lbs. of 3.5 milk, makes dairying competitive with grapes on his farm.



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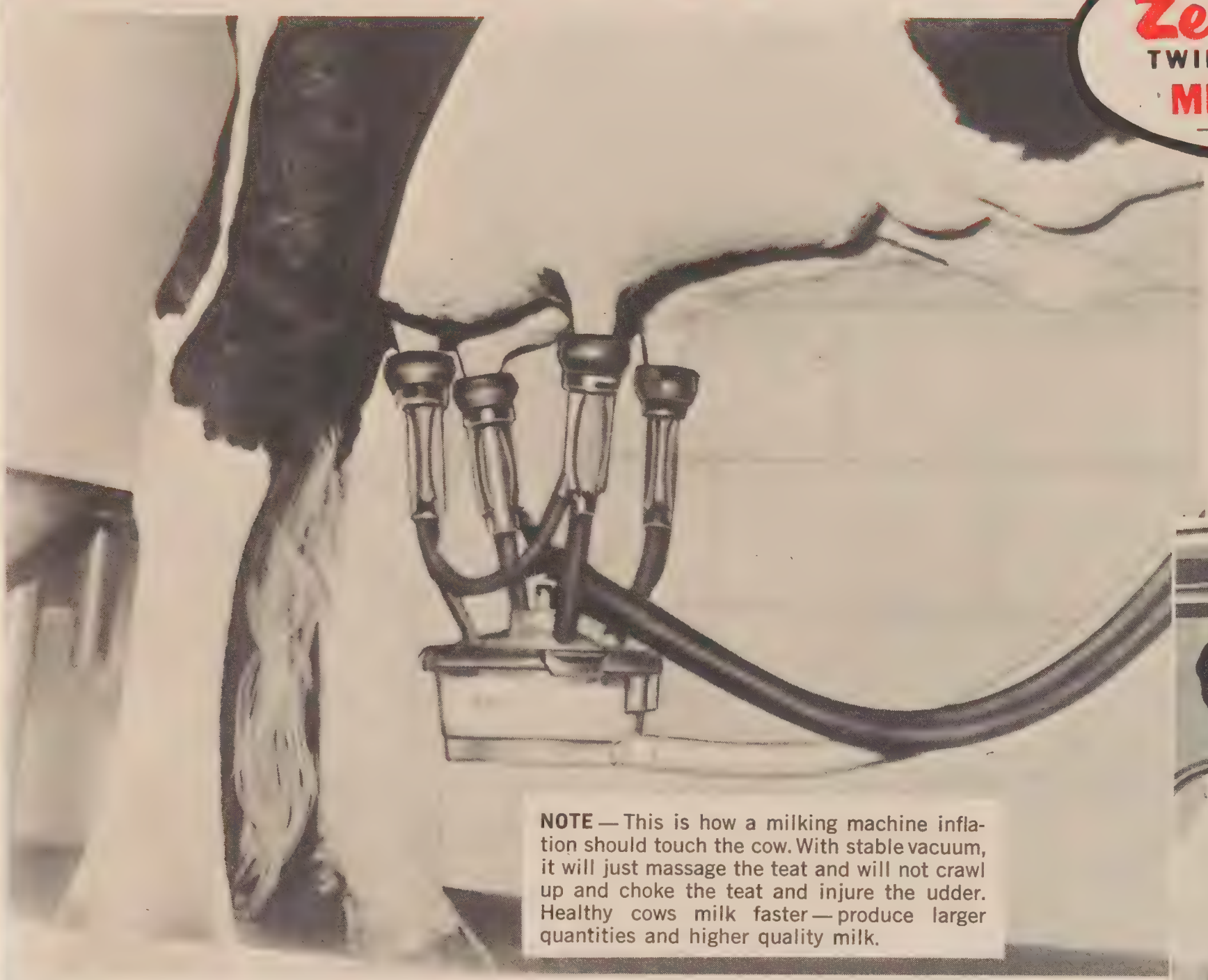

NOTE—This is how a milking machine inflation should touch the cow. With stable vacuum, it will just massage the teat and will not crawl up and choke the teat and injure the udder. Healthy cows milk faster—produce larger quantities and higher quality milk.

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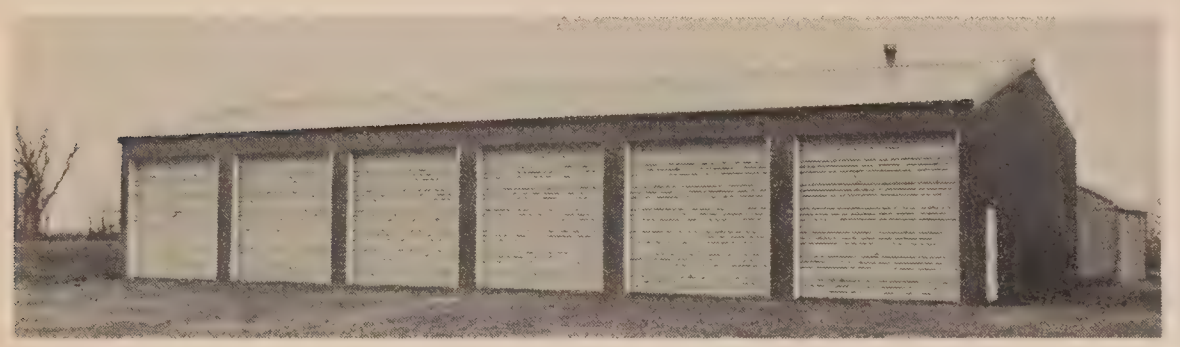

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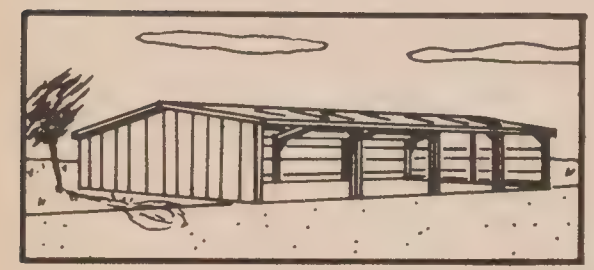

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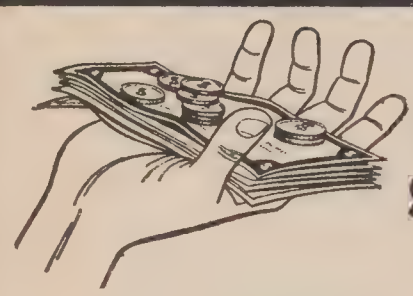

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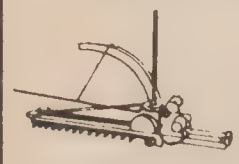

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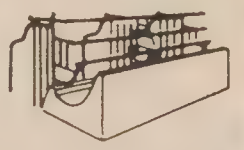

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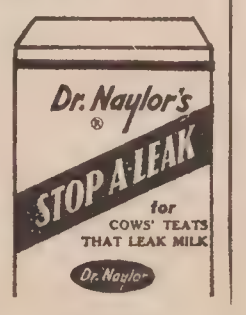

MEASURING MANAGEMENT

THE most consistent conclusion that can be drawn from all farm management research is that there is a wide range of management ability.

There are many external reasons why various farmers fare differently on the economic-success ladder . . . soils, topography, markets, location, family financial resources, etc. These things though, can be evaluated quite objectively, and with reasonable precision.

Nobody has devised a formal formula for **measuring** a farmer's managerial capacity, but some bankers (and other agribusinessmen) have developed some intuitive yardsticks for judging the "man" in management. Here's what they look for:

1. The winner has reasonable goals for himself and his family; he plans ahead on how to move toward those targets. His objectives are fairly well-defined and specific . . . rather than just some hazy notion of "getting ahead." He's a man who creates tomorrow instead of passively waiting for circumstances to determine his course. He makes his own "breaks," and takes advantage of circumstances by diverting them to his advantage.

The loser, on the other hand, drifts with the tide . . . often bemoaning the "bad breaks" that have "come my way." His goals are either very small, or so vague as to be meaningless . . . or both.

2. The "plus" manager cuts quickly to the heart of a management problem, and does it on a realistic basis . . . with little of the ego-protecting emotionalism so common to the human race. He sees the difference between the existing situation and the results desired . . . all in terms of what action must be taken to move toward his long-range objective.

The "minus" manager asks the wrong questions . . . and is likely to blame everyone in sight but himself for any problem. He makes emotional decisions, and often fails to follow through on whatever corrective action he chose.

3. The successful farmer develops keen powers of observation . . . extremely important when dealing with people and biological processes. Before making major decisions he visits the farms of others who have made similar decisions . . . profiting by their successes and failures without the financial investment of "learning the hard way."

The less successful farmer looks but doesn't really see . . . listens, but doesn't really hear. Somehow, he can't get himself out of the way so his mind can concentrate on the decision to be made, or absorb in depth the facts laid out before him. He seldom seeks advice, but rather makes decisions from a narrow base of observation and information.

4. The man who scores touchdowns is able to sort out the big decisions from the little ones; he gets his priorities lined up profitably. He has a finely-honed sense of timing . . . moving hard on the jobs that need doing **now.**

*The third-stringers often seem to have an unerring ability to start through the hole in the scrimmage line just **after** it's been closed up . . . in farm terms, to fix fence when they should be planting oats, and planting oats when they should be planting corn. They invest management time haphazardly without a hard-headed appraisal of the relative importance of a range of decisions to be made.*

5. The successful farmer is able to forgive himself for failure and learn from the experience. He's not married to yesterday's right decisions . . . knows they may be wrong tomorrow. He sees a challenge in every new day, new practice, new trend . . . never satisfied, always looking for a better way.

The less successful manager flails himself with the memory of one failure so that the past dominates the present, and forecloses the future. He's suspicious of new ideas because he doesn't know how to make them work out for him, and he knows that risk of failure always accompanies them.

6. The good manager takes time to manage, has the equipment and space he needs for productive skull sessions and pencil-pushing. He's thought through a lot of possibilities so he can move quickly if unusual opportunities appear suddenly.

The poor manager thinks that pounding a tractor seat from dawn to dusk is the only sign of accomplishment, and that a farm office is strictly for goof-offs. Having done little planning, he's sometimes squeezed into bad decisions by unexpected developments.

7. The "plus" manager is able to involve his family in business and related activities . . . a sign that he seeks growth not only in himself but in those around him. He's likely to take his hired man to some Extension training schools and educational tours. His own horizons continually broaden, and he shares with others the inevitable fruits of those larger dimensions.

The "minus" manager, who often "works like a dog," narrowly limits his horizons both in activity and interest. He is unable to constructively involve his family in the farm business, and looks upon an employee as being somehow inferior . . . just a piece of equipment that happens to be alive.

8. Finally, the successful manager has technical competence that is being constantly developed by further learning. Over the long run, he must be honest and ethical as well as competent if he is to deal with people successfully.

The less successful manager may have the flaw of believing that the end justifies the means . . . jeopardizing that priceless business asset of confidence in integrity.

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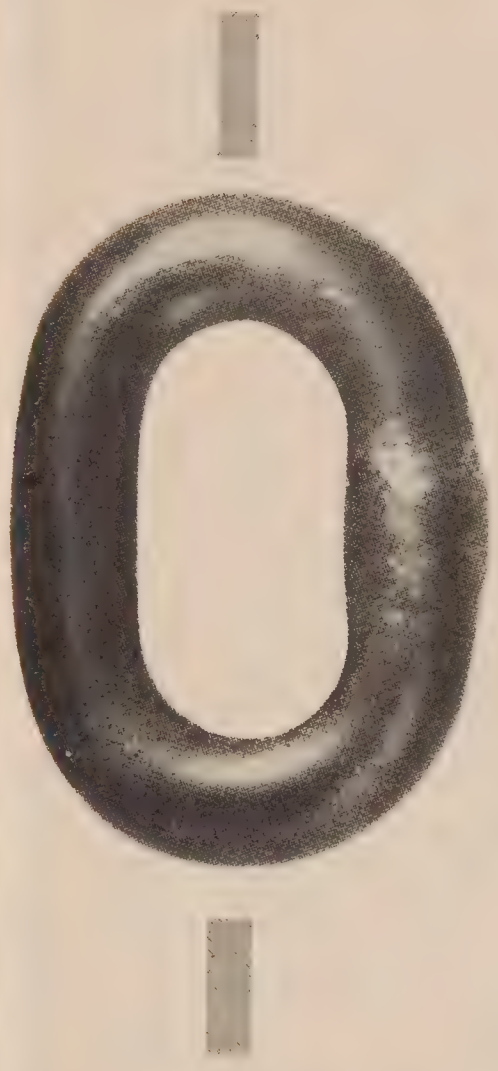

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EDITORIALS

by GORDON CONKLIN

CUT APRON STRINGS

Over the past 35 years . . . and especially in the last 10 years . . . the role of the federal government in our society has grown to gigantic proportions. The Russians have collectivized their farms; we Americans have collectivized our local responsibilities.

In the light of this development, it is especially gratifying to see the Farm Credit Service buck the trend and become sole owner of a $12 billion credit resource. As of 1969 the government-owned capital in the System has been entirely retired . . . a tremendous accomplishment when you consider that there was a federal investment of $638 million in the Farm Credit System in 1939.

Capital has become the most important input of modern agriculture, and farmers are fortunate to have an organization that does so well at meeting their credit needs. A ready supply of credit has enabled farmers to substitute capital for labor on a massive scale . . . releasing workers to staff an industrial complex that . . . together with agriculture's efficiency . . . creates in these United States the highest standard of living in the world.

Here is an example of government encouragement that did not become permanent dependence. Congratulations to all involved!

INSTANT OBSOLESCENCE

Seasonal workers from the South have traveled to the Northeast for many years to work at harvesting crops . . . primarily fruits and vegetables. In recent years, governmental regulatory pressure on growers hiring seasonal workers has grown by leaps and bounds.

Farmers have tried to respond to this pressure in order to continue hiring seasonal labor, but bureaucratic insulation from economic reality has reached a high point in New York State. Growers invest thousands of dollars to make housing for seasonal labor comply with State Health Department regulations one year; the next year it becomes obsolete because regulations are changed. Lenders are notably reluctant to advance capital for that kind of project!

For instance, housing complied one year if it had a ceiling height of 6.5 feet . . . but the next year it had to be 7 feet. Talk about raising the roof! Square feet required per person changes abruptly, as does the number of wells per sink in kitchen areas, type of toilet, etc., etc.

One Health Department representative at a recent meeting was asked whether seasonal labor could be housed at a nearby State Park public cabin area . . . and was informed that they could not because these cabins would not meet specifications! I've been in the home of many a fruit and vegetable grower that wouldn't meet those specifications, either.

Aren't farmers . . . also a minority group . . . entitled to some protection from arbitrary regulations that can render facilities obsolete overnight by requiring major rebuilding for compliance?

Shouldn't public hearings be held before major changes are made in regulations . . . as a legitimate part of the democratic process? And wouldn't an appeal board short of litigation be a reasonable component of of that same process?

Shouldn't the State Health Department, in all justice, accept the creation of an Advisory Board on seasonal labor housing that would include some farmers?

Have the people pressuring farmers ever peered deep into their own souls and found that they may be unloading on farmers a collective guilt complex in a way that isn't costly to "the unloaders?" Are they ready to face up to their own responsibilities inherent in the shifting of seasonal labor housing to the cities, towns, and villages of the Northeast if on-the-farm housing is closed?

Have the folks pushing the "big, bad farmer" ever asked the seasonal laborer whether **he** wants to see the labor camps closed? Is a "valiant blow for the underprivileged" **really** being struck by making it unrealistically difficult for farmers to offer him gainful employment?

Do those who write all the bitter "people-are-more-important-than-capital" letters consider that improvement in material well-being . . . including that of the seasonal laborer . . . stems from the very economic processes they tend to deride?

To be grabbed in the heart is commendable as a beginning . . . but it proves constructive in the long run only when coupled to a thorough acquaintance with at least most of the pertinent facts. To be impulsively concerned about living conditions less than the best is understandably American . . . but to approach a situation with concern for **everyone** involved is undeniably right.

THE FAT'S IN THE FIRE

It's comforting to visit with others who have similar problems . . . sort of sharing the burdens of the world, and learning that others are fallible, too.

American dairymen have worried for years about a surplus of butterfat, and have agonized over the significance of that surplus in terms of DHIA programs, breed improvement guidelines, and dairy marketing. Their colleagues in Europe are also worried, because the Common Market countries have a monstrous surplus of butter . . . 500,000 tons! This mountain of butterfat has forced European announcement of an "internal tax" designed to keep out competing fat in the form of American soybean oil.

Actually, there is a worldwide surplus of butterfat . . . and there has been for some time. Today's European butterfat crunch is another reminder of the need to come to grips with the situation more realistically than has been the case in the past.

Is it realistic to think that the 1968 level of spending on dairy product research in the U.S. . . . only .1 percent of industry sales . . . is adequate?

Are dairymen who refuse any responsibility for dairy product research and promotion taking a realistic look at the fact that vegetable fat sells for roughly one-fourth the price of milk fat?

Has the dairy industry realistically . . . and fully . . . exploited the opportunities implied by the fact that U.S. per capita consumption of fluid-nonfat and low-fat milk **rose** 11 percent between 1966 and 1967 . . . while nearly every other product category **declined?**

Is it realistic for dairymen . . . sensitive to the scars from futile battles of the past . . . to fight products containing a mixture of butterfat and oleo, such as "Butterine?"

Have all the dairy breed organizations really come to grips with the long-run implications of the long-continued surplus of butterfat?

Is it realistic for dairymen to passively sit back and enjoy their temporary prosperity . . . blissfully thinking some basic problems will just fade away? Uncle Sam had in the neighborhood of 80,000 tons of butter on hand during 1968 . . . way below the 500,000 tons that Charlie DeGaulle and his neighbors had squirreled away, but still enough to deserve thoughtful consideration!

LAND GRAB

In a number of places in the Northeast, the U.S. Army Corps of Engineers is developing . . . or has developed . . . economic feasibility studies for dams. One of the areas recently involved was the Genesee River, with a dam proposed at Portageville, New York. It now appears that vigorous local opposition has shot this proposal down.

If you want to know how to go about analyzing one of the Corps' feasibility reports in a scientific fashion, send to the Department of Agricultural Economics, Cornell University, Ithaca, New York 14850, and ask for a copy of "Critique of the Economic Justification for the Genesee River Project at Portageville, New York" . . . it's A.E. Res. 264. Authors are L. W. Libby and R. J. Kalter.

The report raises questions about the appropriateness of the discount rate used in calculations by the Corps (3.25 percent) . . . and also questions the "time horizon" of 100 years over which to spread the cost. Both these figures are extremely important in calculating the benefit-cost (B/C) ratio used to determine the feasibility of such projects.

When it comes to creating lakes, suppose we should re-define BC as Before Corps, and AD as After Dam?

HOOKER

From time immemorial, up to a few years ago, most farmers sought ways to legitimately **lower** their tax-reportable incomes. Then along came Social Security for farmers . . . with the benefits directly proportioned to the reported income. Older farmers close to retirement then became intensely interested in ways to legitimately **increase** taxable income, at least up to the maximum reportable for Social Security purposes.

When it comes to limiting payments to farmers by federal farm programs, perhaps the same principle could be used. Why not limit government payments to farmers to some percentage of net farm income reported for income tax purposes? For example, if 20 percent were chosen as the figure . . . and $10,000 was the taxable income reported . . . then $2000 would be the ceiling for farm program payments to that farmer. The higher the taxable income, the higher the ceiling, and vice versa.

This would eliminate from the ranks of eligibility the tax-loss farmers who use farming losses for offsetting income from other sources. And it would provide a flexible ceiling geared to the size of the farm operation, preferable to a one-figure maximum that really wouldn't fit any situation perfectly.

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A FRESH START

by Bob Cudworth

"MAYBE dairy farmers ought to sell off their herds occasionally and start over. Maybe they get in a rut, and their herd performance suffers as a result."

Virgil Briggs, Deposit, New York, feels he had the advantage of a fresh start because his father had sold the milking herd in 1959 and kept 36 heifers. This was four years before Virgil bought the farm from his father.

Top Herd

In the five years he has operated the farm, Virgil has built the herd production to an average of 19,453 pounds of milk and 734 pounds of fat on 52 cows. This is one of the top DHIA records in New York State for the year ending April, 1968. It is also 858 pounds of milk and 14 pounds of fat over the previous year's production average.

With production like that, he evidently is doing a lot of things right. Among the management practices he feels most important are: heavy feeding so cows are never hungry, watching cows carefully so he can detect disorders, not rushing the milking procedure, and culling heavily.

Constructioneer

Virgil was born and raised on this farm. He's actually one of the 5th generation of Briggs to live here. But after his boyhood years, he spent time in Army service and was in the construction business for 15 years.

When he bought the farm from his father in 1963, Virgil put some of that construction knowledge to work by clearing out stone fences and hedgerows, draining off wet ground. "We've tripled the usable land on this 200-acre farm to where it could handle 100 milkers. For example, we have put in 10,000 feet of diversion ditches to improve our drainage conditions."

Virgil feels his father made a wise move in selling off his herd in 1959 and starting over with 36 heifers. He feels dairymen hurt themselves many times by keeping cows in the herd that "might" do better another year.

Culls Hard

"My first-calf heifers are the first to go. If they aren't going to produce 500 pounds of fat the first year, then out they go . . . maybe in the first or second month. There's no point in keeping a heifer around just because she's good type . . . because too many times that second year is no better than the first.

"It's hard to say what the average age of my herd is because there is a wide range. Some are first-calf heifers, while others are as old as 11 years."

Virgil's wife, Ruth, points out that he watches the condition of his cows closely. He doesn't hit them, mistreat them or rush them at milking time. He's quiet and relaxed around them. Herd health is good with very little trouble from milk fever, mastitis, or other problems.

He takes two hours to milk the 52-cow herd, using three milker units. The stanchion barn is equipped with a pipeline which empties into a 1,000-gallon tank. Virgil comments, "I feel our stanchion barn with pipeline is set up to save us labor, yet permits close attention for management purposes so that we can produce over a million pounds of milk a year."

As far as feeding is concerned, Virgil feels that his heavy producers just can't get enough feed, but he feeds often in order to get good utilization.

He "lead feeds" and makes especially sure his cows are in good shape at freshening. He likes to have his cows dry for 30 to 45 days . . . doesn't feel they need longer . . . but he leaves dry cows with the milking herd and sees that they all get the same roughage.

Virgil uses a controlled feeding system, keeping cows in the barn 12 hours a day, and doesn't depend on pasture. He feeds corn silage, greenchop or haylage twice a day the year around.

He prefers using corn silage at one feeding, and haylage (44-50 percent moisture) at the other, because he feels the cows like the variety . . . and from a nutrient standpoint the silage is heavy on energy and the haylage on protein. He gets three cuttings yearly from his alfalfa-timothy mixture, and started some birdsfoot and trefoil in 1968.

More Haylage

His future plans are to go to more haylage on his first crop from the meadows in order to get around wet weather.

The grain ration . . . corn and soybeans mixed with a 50 percent supplement . . . makes up into a 20 percent protein feed. Top producers get 30 to 32 pounds of grain daily.

Cows have been bred artificially at the Briggs farm for more than 20 years. Virgil believes in giving his heifers a fast growing start and breeding them young. Many of them freshen at 22-23 months of age.

The Briggs family put in all of the crops themselves, including 55 acres of corn. They have a full line of machinery and believe in a preventive maintenance program to keep it in top running shape. The machinery is all put under cover in the fall.

"This is strictly a family farm operation, but we don't feel we are 'tied down' unnecessarily. We go dancing every Saturday night, we ride horses for a hobby, and when we want extra time off . . . there are neighbors who can and will handle our milking for us."

Being away for 15 years has proven to him the family farm is a pretty good place to live!

The operation and maintenance of equipment comes easily to Virgil Briggs, who returned to the farm after spending 15 years in the construction business.

SYNTHETIC BEDDING

With the trend toward increased confinement and increasing herd size, many dairy farmers face rising bedding costs. New synthetic bedding materials may help keep costs down.

A ton of straw costs about as much as a ton of hay, says Calvin Cramer, University of Wisconsin specialist in agricultural engineering.

Synthetic bedding materials are replacing large amounts of straw, corn stalks and sawdust for some farmers. These new bedding materials include a poured-in-place synthetic resin mat and rubber mats.

Rubber mats are laid on the concrete cow stall platform and held in place mechanically. The mats require trimming and fitting, and they can present a sanitation problem.

Synthetic resin mats are laid in two layers. The first layer is a hard resin about ⅛-inch thick. This layer acts as a filler for the concrete surface and it provides insulation between the concrete and the cow.

A second layer of resin ⅛ to ¼-inch thick is applied to the base. This top layer resembles rubber and forms a soft, smooth surface. Since the resin for both layers is applied as a liquid, trimming or fitting is eliminated, and a tight seal is produced over the entire stall surface.

Two pounds of sawdust per stall keeps cows clean in tie stalls with properly-adjusted cow trainers. If there is no bedding and the surface is wet, the resin may be slippery.

No Buildup

Unlike the rubber mats, the resin mats present few sanitation problems. The sealed mat does not allow a buildup of contaminating materials under it.

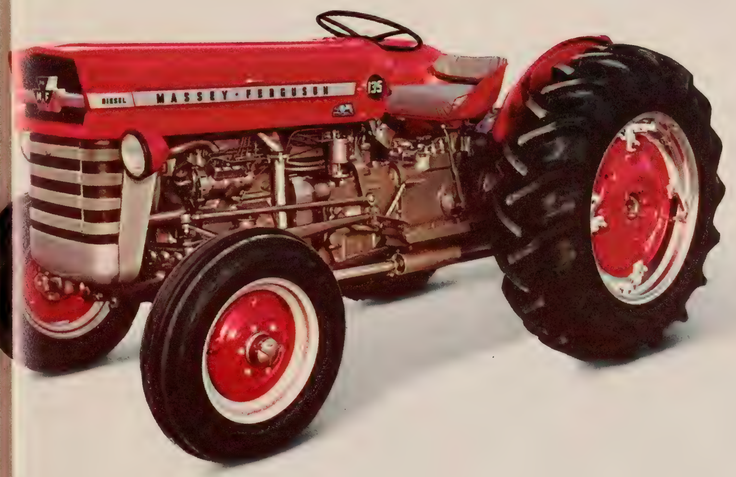
These new synthetic resin mats are not yet commercially available. More developmental work will be done before they are sold to farmers.

The anticipated cost of resin mats is about the same as for rubber mats . . . $1.25 per square foot. Since a six foot by four foot cow stall has 24 square feet, this is a cost of about $30 per stall.

This cost of $30 per cow makes the resin mat competitive with straw. Cramer says that each cow requires from one-half to one ton of straw for 240 days. Synthetic bedding materials reduce the amount of straw needed by about two-thirds. If straw costs $20 per ton, saved bedding costs from just a few years would pay for the mats.

If annual alfalfa becomes popular and oats are eliminated as a cover crop, more farmers will probably consider using synthetic bedding materials, says Cramer.

If you think they don't make them this tough any more think again.



MF 135 is a tougher tractor than the 3-plow model we made fifteen, or ten, or five years ago. Sure, you still see a lot of 35's working away and they probably will for years. We know how good the MF 35 was, so we had to make the 135 better. And tougher. Today you get a more rugged tractor. A more efficient power plant. Control center and seat that is more comfortable for *you*.

You can buy the MF 135 with a lot of options. Flat top fenders, power steering, Multi-Power, independent pto, MF Pressure Control and more. It's your choice. Just remember that under the sleek, beautiful exterior is a tough, hard-working tractor that farmers use than any other in the world. Just like the old 35, the MF 135 is the world's best selling tractor. And you don't get there by being soft. See your MF Dealer.

Massey-Ferguson The Challengers

Massey-Ferguson Inc., Des Moines, Iowa

BHL

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Quack rhizomes are tough.

That's why you need two AAtrex sprays to eradicate this perennial grass.

Quackgrass rhizomes are vigorous underground stems that store food reserves and produce new plants. The first AAtrex spray is needed to start killing the rhizomes early. Then the second spray gets any regrowth that may come on later.

Broadcast your first AAtrex spray one to three weeks before spring plowing fields going into corn. Use 2½ lbs. per acre.

Eradication of a severe infestation of quackgrass requires a total of 5 lbs. per acre of AAtrex. But control can still return you $4-5 for each $1 invested.

Your second broadcast application of 2½ lbs. per acre can be made while planting or soon after corn is in, but before weeds are 1½" high.

AAtrex is the new brand name for atrazine. Just ask for AAtrex.™

The split application of AAtrex also gives you control of most annual broadleaf and grassy weeds in corn. All it needs is rainfall to take it into the soil.

Geigy Agricultural Chemicals, Division of Geigy Chemical Corp., Ardsley, N.Y. 10502. ***AAtrex by Geigy***

BHL

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S.P. CHOPPER

Carlos Page, who farms near Leroy, New York, bought a self-propelled field chopper in 1968. It has three heads . . . one chopping three rows of corn, another that snaps and chops ears from three rows of corn, and a pickup head for hay-crop silage.

He puts corn silage into two concrete-stave tubs . . . a 24×55, and a 16×55. Haylage goes into a 25×65 Harvestore, and high-moisture ground ear corn into a 20×60 of the same brand. Generally, he figures ear corn from around 1 to 1.5 acres per foot of silo . . . so he puts from 60 to 100 acres of corn up as high-moisture ear corn. In 1968, he grew 200 acres of corn, with about half going into the silos for silage.

He feeds a blend of haylage and corn silage . . . about 50-50 by volume (but not by weight, as corn silage is heavier per unit volume).

There are 140 free stalls in the Page barn . . . and the milking herd numbers 120, growing toward 140. Liquids and manure from the milking parlor, milkhouse, feeding area, and holding area go into a 90,000-gallon concrete tank from which they're pumped into a tank spreader. During inclement weather, manure from the free stall area also goes to the tank, but otherwise it's pushed off a ramp each day into a spreader.

The tank cost $7600 to build . . . including labor costs (entire job was done by a contractor). There are two openings over the tank, each measuring two feet wide and sixty-six inches long. — *G.L.C.*

GOOD CORN

Good crop yields, and good cow yields, are created on the farm of Donald Short of Canajoharie, New York, by providing both cows and crop lots of raw material to rearrange.

For instance, one field of corn posted a yield of 170 bushels of corn per acre in an official test. To feed the crop, Donald had a mixture of Atrazine (2 pounds per acre) and liquid nitrogen (70 pounds of N per acre) custom-applied just before the last harrowing ahead of planting. He followed up with 250 pounds of 10-20-20 in the planter . . . and then came in with another 50 pounds per acre of N sidedressed at the same time he cultivated in July.

He shoots for a plant population of 26,000 to 30,000 per acre at harvest time . . . found that 35,000 was too high for the relatively-dry summer in his area in 1968. As a DeKalb seed salesman, Don understandably grows only one brand of corn . . . and reports that XL306 is one of the better-performing varieties at his farm.

The corn is used to make silage and grain for the eighty head of dairy cattle (40 cows). The Shorts have their own grinder-mixer . . . and use ear corn to make up ⅔ of the grain ration. Hay is also fed liberally, and all fed to the herd is heat-dried on a batch drier.

The cows respond by posting a DHIC herd average of 17,000 pounds of milk, 590 of fat. A 600-gallon Zero bulk tank teams up with a dumping station to make milk transfer easy from the stanchion barn.

Sons Bob and Bill both show great interest in dairying . . . Bill recently placed second in national 4-H dairy cattle judging competition at Columbus, Ohio. — *G.L.C.*

NO EXPANSION

Many dairymen are thinking about building a free stall barn in order to expand the size of business, but Paul Almeter of Almond, New York went to free stalls two years ago without increasing the present size of 50 milkers. Perhaps his decision was made simpler by the fact that he doesn't have to start from scratch, and therefore the needed investment was somewhat less. He built a milking parlor and an addition to the barn measuring 16′×48′.

Paul Almeter

Paul's herd management differs quite a bit from that of many dairymen. For one thing, he grows no corn.

"Our elevation is too high to grow good corn," he says. "I sold my hay baler 15 years ago, partly because I am bothered with hay fever. Our meadows are mostly birdsfoot trefoil, with some fields as old as 15 years.

"The crop goes into three silos, each 16′×48′, and we fill some twice a year from the second cutting.

"Grass silage is the only roughage they get, and my experience has been that the cows milk better than they do on corn silage. The birdsfoot is direct cut . . . no wilting or preservative."

Mr. Almeter buys all replacements. "I have a neighbor who is a cattle dealer. I have known him for years, and am confident he wouldn't sell me a poor animal. In fact, I replace about 6 a year, which is considerably below average. We have one cow that's 15 years old."

Another place where management is interesting concerns grain feeding. "We grow some oats," Paul commented, "and we buy around 100 tons of ear corn a year. The oats and corn-on-cob are ground, and this is the grain they get. We do not buy any high protein supplement.

Of course, the protein content of the birdsfoot may be higher than the roughage on many farms. Anyway, production is eminently satisfactory.

The cows are on pasture, and get no other roughage for about a month. "We put some commercial fertilizer on meadows after the first cutting," said Paul. "And we probably should do more."

More and more I am convinced that good farmers follow practices that work under their conditions. I was especially interested to find a man who is content with the size of business he has.

Mr. Almeter has one hired man. The children include three girls and a boy . . . but the boy is the youngest (9 years) and isn't yet ready to do a lot of farm work. — *H. L. C.*

FAMILY FARMS

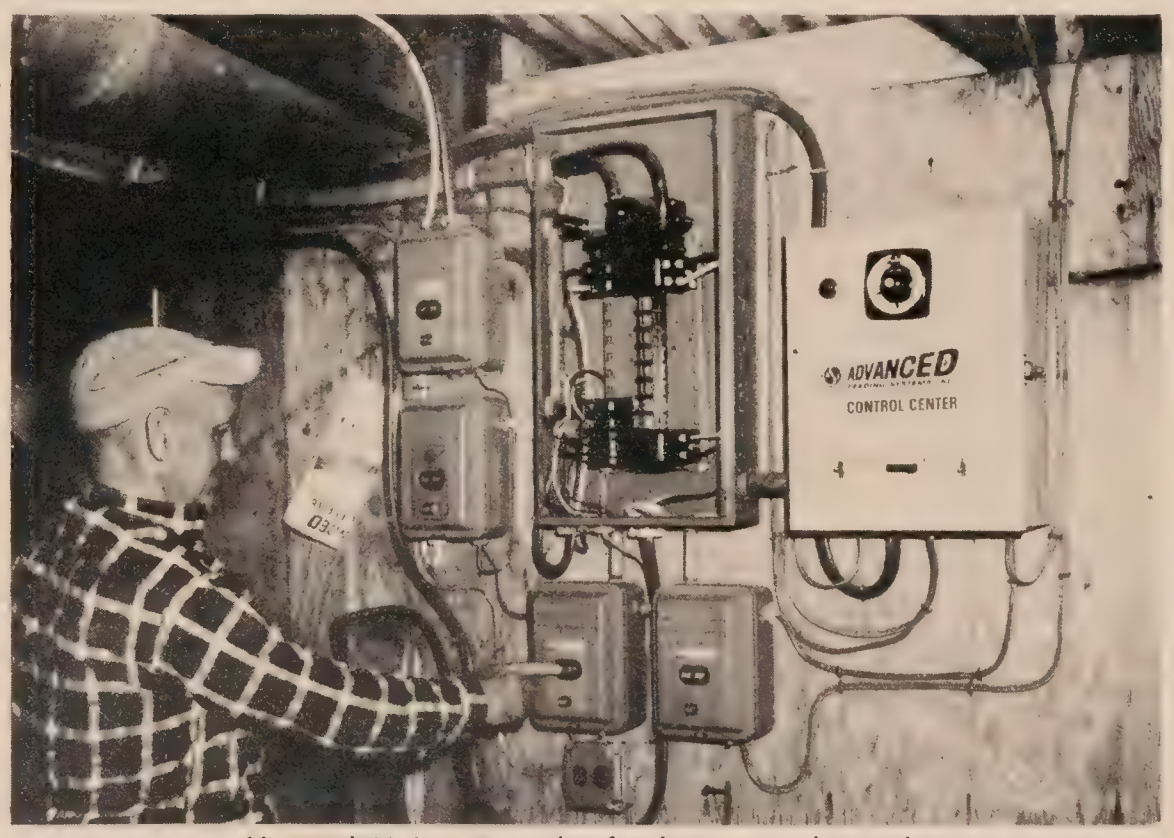
The Collins family of Blossvale (Oneida County), New York, now operate what were 12 separate farms 30 years ago. Clifton Collins has encouraged four sons to set up two farm partnerships. Sons Calvin and Roger have one 96-cow setup; Raymond and Floyd a farm carrying a herd of about the same size . . . and Clifton is a partner in both farm operations. The Collins' have always had registered Holsteins, and have stimulated family interest by showing animals at local fairs.

The sons were involved in 4-H and FFA programs during their earlier years, and each began selling milk in his own name (from his own cattle) while still in school. Clifton has consciously delegated responsibility . . . and authority . . . so that his sons would have a feeling of being a part of the management team. Three of the boys received Empire Farmer Awards, and one the American Farmer Award . . . all four have attended the National FFA Convention at Kansas City.

The sons have been able to take some time off over the years, too . . . so that their noses weren't continually to the grindstone. Major decisions are talked over carefully; no partner can commit the partnership to an expenditure of more than $300 on his own.

An interesting sidelight here is that Roger and Calvin have both taken a course in artificial insemination . . . and therefore do their own AI work with both herds. Frozen semen is bought in ampules, or it's collected from herd bulls on the Collins farms and processed for later use by a custom operator doing this work. The Collins have their own liquid nitrogen container for holding frozen semen, and are able to obtain nitrogen refills without difficulty.

Here's a farm family that has done unusually well at the sometimes difficult job of involving sons in the business. As a necessary part of doing this, the Collins have done what is so typical of farming all over the country . . . combined what were once many family farms into businesses with the size required to meet the competition of today's conditions. — *G. Conklin*



Howard McIntyre at the feeding control panel.

TIRELESS HELPER

Howard McIntyre of Perry (Wyoming County), New York, makes full use of the help of Reddy Kilowatt in his free stall barn (76 stalls). From the completely-mechanized silage handling to the mercury arc lamps that turn on automatically at dusk, electric power carries the ball.

There is very little hay fed at Macsfarm . . . with almost all the roughage coming from two 20×60 sealed-storage silos, and high-moisture grain corn from a 20×30. Any desired blend of these three ingredients can be put together on their way to the feed bunk.

One other interesting item in Reddy Kilowatt's performance at this farm is the intercom setup between house and barn, with the sounds carried over the existing electric wires . . . no need to string additional wires.

TRACTOR CABS

by Wes Thomas

ONCE considered an unnecessary luxury, cabs are now coming into widespread use. They help increase the efficiency and productivity of the operator while reducing hazards to comfort and to health. Often, they enable a farmer who is elderly or in poor health to continue farming.

If you are considering a cab for your tractor or self-propelled combine, you'll find a bewildering array available. Here's a discussion of the various types, with specific features to look for, or to avoid, in picking one for your particular needs:

Canvas Cabs

For cold-weather operation, waste heat from the engine is adequate to help warm the operator if he is at least partially protected or shielded. Thus, a transparent windshield combined with a canvas side shield which extends forward along the engine to trap the necessary heat helps reduce the discomfort of cold weather. For more complete protection, a top and rear portion can be added.

These cabs, which are relatively inexpensive in first cost, are available from several manufacturers for almost all models and makes of tractors. Here are the important selection points:

Fit . . . Some cab manufacturers tailor each cab for an individual make and model tractor. Others, to cut costs, may use one unit for a variety of tractors. When you install one of the second type, you may have problems of fit around lights, belt pulleys, or other optional-equipment items.

Either type will probably keep you warm in cold weather. Your choice depends primarily upon the importance to you of appearance, and the possibility of catching or tearing poorly-fitted canvas.

Heat Control . . . Heat to the operator is normally controlled by the portion of the engine sides covered by the canvas panels. Thus, the canvas side panels should have snaps or catches that permit opening them on warm days.

Clearance . . . You have to be able to control the tractor effectively with the cab installed. So check for clearance around steering wheel, gear shift lever, hydraulic control levers, and other necessary control devices.

You'll probably want to stand occasionally. If the cab has a top, be sure there's enough head room. And be sure to check for adequate clearance for getting on and off the tractor.

Installation and Removal . . . You'll need to remove the canvas cab in the spring, store it for the summer, and reinstall it in the fall. The ease or difficulty of these tasks should also be checked.

Safety Warning . . . Since the air blast from the tractor engine fan is blown back around the operator, there must be no leaks in the portion of the engine exhaust system inside the hood. Otherwise, exhaust fumes endanger the operator.

Metal Cabs

These completely-enclosed cabs are designed for both summer and winter protection. For winter use, the cab is closed and heated by the engine. For summer use, the top serves as a sunshade, and the side panels and windows are opened or removed. Here are important selection points:

Structural Rigidity . . . Although excess weight is undesirable, it should not be eliminated at the expense of structural stiffness. A flimsy structure cannot meet any of the following requirements.

Mounting . . . Ideally, the cab should be attached to the tractor at only three points. Any additional anchor points increase the twisting action which is applied to the cab by the "give" of the tractor when operating on rough ground. Some sort of vibration pad should be used between the tractor and the cab at each mounting point.

Access . . . Even when "buttoned-up" for winter use, the cab should permit easy entrance and exit. If the tractor has no rear hitch, the cab door is usually at the rear. On some tractors with a rear hitch a front door located between the tractor wheel and the engine housing is required.

Clearance . . . Just as with the canvas cab, check for adequate clearance around all the necessary tractor controls. In addition, none of the parts of the cab should prevent full travel of the controls.

Standing Room . . . Adequate clearance is necessary here, unless the top is hinged so that it can be opened easily.

Visibility . . . It's important to be able to see in all the required directions. In addition to the normal straightahead view, remember that you'll often need to see to the side, rear, and almost straight down.

Glare . . . Additional glass area often increases glare and eyestrain, as well as visibility. Features which overcome glare include tinted glass, dark surface on the cab floor, dull finish on interior walls, and tilted glass. Glass that tilts outward at the top also accumulates less dust and dirt.

Noise Control . . . A poorly-designed metal cab produces about the same effect as a bass drum. The metal panels act as sounding boards that magnify the noise and vibration of the engine. Therefore, adequate support of all sheet metal panels, and liberal use of sound-deadening insulation on the inside walls are essential.

Mounted Equipment . . . Check for possible interference with installation and operation of any equipment that you plan to mount on the tractor. Most cabs are available in versions that permit operation of rear hitch-mounted implements, but such items as manure loaders and corn pickers should be checked carefully. Visibility, access, and work space must also be available.

Removable Panels . . . For hot-weather use, you'll need to be able to remove all the windows and side panels, leaving only the framework and roof for shade. However, be sure they include adequate sealing arrangements to prevent drafts and heat loss when they are installed for cold-weather operation.

Air-Conditioned Cabs

In this most-advanced version of protective cab, the air is controlled to provide a comfortable temperature and to remove dust.

In some cases, such cabs are available only from the original manufacturer of the tractor or combine. In others, you may find independent manufacturers who can meet your needs.

In general, the requirements for regular metal cabs apply also to the air-conditioned versions. There is one major exception . . . removable panels and roof. In an air-conditioned cab, these features aren't needed, and they can even contribute to poor performance.

Since comfort of the human body depends on temperature, humidity, air movement, and freedom from dust or dirt in the air, an effective air-conditioning system must control all these items.

Heating . . . A relatively-simple automotive-type heater will maintain the recommended temperature of 60 to 70 F. Warm air should enter the cab near the floor, to provide good circulation.

To prevent fogging and icing of the glass, you'll need some sort of a defrosting arrangement similar to that used in automobiles. Remember, though, you need to see through side and rear windows, in addition to the windshield.

Heating system capacity should be adequate to raise the cab space to the desired level in 10 to 15 minutes from a cold start.

Cooling . . . For hot-weather operation, you'll need to hold cab temperature to 10 to 15 F below outside air temperature. Because of the heating effect of the sun, the cooling system actually has to lower the temperature in the cab by 40 to 50 F. In many cases, this requires refrigeration capacity of 2 to 2½ tons.

Humidity control is obtained as a by-product of temperature control. When warm, moist air circulates over the cooling coils, the excess water vapor condenses to a liquid and drains away.

Pressurization . . . This is essential for operation in dusty or dirty conditions. Otherwise, the cab becomes a dust trap. Pressurization produces outward flow of air through any small leaks in the cab. Thus dust and dirt cannot enter.

The outside air intake for the pressurizing blower must be equipped with either an oil-bath or dry-type air cleaner. The intake should also be located so that it will be least affected by swirling currents of air and dust during normal operation.

Ventilation . . . Air in the cab should have just enough movement to provide uniform conditions throughout the cab, but it should not be enough to create drafts.

The ventilating system should provide at least 10 cubic feet of fresh air per minute. Smoking raises the requirement by 6 or 7 cubic feet per minute. To provide adequate air movement, the total flow of (fresh and recirculated) air should be 300 to 600 cubic feet per minute.

The outlet for ventilating and cooling air should be located relatively high in the cab.

Components . . . The mechanical equipment needed is similar to that used for automotive air conditioning. Included are an engine-driven compressor, a condenser to cool the refrigerant, an evaporator or cooling unit in the cab, plus the necessary piping and controls.

Any components that must be mounted in the cab should be located to avoid interference with entrance or exit, or with access to any necessary tractor controls.

LEARNING BY DOING

A. A. Achievement Award Winners

by Isa M. Liddell

ONCE AGAIN the months have rolled around, and it is time to tell you something about the American Agriculturist Foundation Award Program and the winners.

This program was first set up in 1945 for boys in vocational agriculture, and two years later the girls in vocational homemaking were included. The idea back of the Awards is to focus attention on the importance of training for leadership, to emphasize progress already made, and to encourage the young folks to set their sights high.

Something Added

The year 1967-68 found something extra added to the project. In addition to Awards to participating schools, a **Boy and Girl-of-the-Year** were chosen from among the participating schools in the Northeast. Cheryl Schoenfeldt, North East (Pennsylvania) High School, and Frank Graves, Mexico (New York) Academy and Central School, were the recipients. Each received $200 toward continued education.

These special awards are continuing for the year 1968-69.

Many other boys and girls had fine records in their schools and communities, and we are happy to report on a representative few in order to give you some idea of the kind of work they have done.

Peter Bourgoine of **Caribou (Maine) High School,** exemplifies the ideals of the American Agriculturist Foundation Award, in that he showed the greatest progress during his last two years of vocational agriculture in agricultural mechanics, and also made a great deal of improvement in social contacts both in and out of school, developing characteristics of responsibility and citizenship.

At **Rising Sun (Maryland) High School, Joseph Ayers** was chosen. Joe lives on a 105-acre dairy farm as a partner with his father in the family farm enterprise. In the first year of vocational agriculture he owned 12 head of registered Holstein cattle; in four years his part of the herd has increased to 20 head, all registered. In 1967, 13 acres of corn was added to his farm program, and it yielded 145 bushels per acre. Joe is especially outstanding in his knowledge of dairy cattle breeding and selection, has won national judging honors, and is majoring in dairy science.

Ronald Foley, Bristol County (Massachusetts) Agricultural High School, was chosen to receive the Foundation award because of the fine record he has established in his studies as well as for his general display of cooperation in achieving that record.

Stuart A. Arnold, teacher of vocational agriculture, says, "His attitude and enthusiasm in and out of class has been appreciated by both the faculty and his fellow students, and each organization he has worked with has benefited from his active and intelligent participation. He has had four years' experience in greenhouse production, floral designing, and landscape gardening."

Working against the results of a major operation which immobilized the flexibility of 70 percent of his spinal vertebrae, **Andrew H. Rockwood, Norfolk County (Massachusetts) Agricultural School,** majored in forestry and conservation. During his four years at the school he proved himself an outstanding student, and a person highly respected by the staff. His projects were in the vegetable and fruit department and in home improvement. He is studying at the University of Massachusetts and the Stockbridge School of Agriculture, and plans to major in weed technology.

James Search of **Allentown (New Jersey) High School** received the Award because he had the best-supervised farming program in the entire vo-ag department, and was always eager to assist in any activity. Among other projects, he organized the Children's Barnyard Exhibit at the 1966 New Jersey State Fair, and showed dairy cattle at the New Jersey FFA Dairy Show for three years.

Ronald White of **Cazenovia (New York) Central School** has worked and helped his parents develop a highly-efficient 20,000-bird cage operation near New Woodstock, New York. In high school he maintained high grades in all his subjects, and in 1967 represented his school at Boys State. He has held the offices of vice president and president in the local FFA chapter, doing a "top flight" job in both offices. He plans to return to the home farm after college and to a career in poultry.

During his four years in high school **Robert McNeilly, Franklin (New York) Central School,** operated the home farm with some help from his brothers. He has been an FFA member for the four years and has held office. Early in 1968 Bob was chosen to participate in a television program where the conservation of natural resources was discussed. He is now studying conservation at the Pennsylvania State University.

The report from **Greenwich (New York) Central School** on **George Allen,** their choice for the Foundation Award, showed him to be a young man of exceptional capability. He is quiet and reserved, but with a drive that is outstanding, together with force and talent. He has held many offices in the school and local FFA group, won essay contests and other awards, went on a "People-to-People" goodwill tour of Europe in the summer of 1967, and is active also in church and 4-H. After college, he plans to return to the home farm and machinery dealership as a partner.

Larry Nelson, Hamilton (New York) Central School, plans to major in electrical technology. Larry has worked on local farms during his vo-ag training, and his report states that he has conducted an outstanding agricultural experience program. He has had much experience in the electrical field, including service installation, silo unloaders, barn cleaners, and complete wiring of barns and houses. He was the recipient of the Empire Farmer degree and the State FFA Foundation award in electricity.

As mentioned at the beginning of the report, **Frank Graves, Mexico (New York) Academy and Central School,** was chosen **Boy-of-the-Year** by our panel of judges.

Frank graduated with a major in vocational agriculture. He was active in chapter work, and in 1967, when he had 5 head of stock, received the FFA Dairy Foundation Award given to the best dairy boy in the chapter. He has been on judging teams, and his contribution and performance both at school and at home have been exceptionally fine. District Principal Pierce comments:

"Frank is the kind of person upon whom America must depend for its existence . . . the person who is always there when he is needed; who is law-abiding, conscientious about civic duty and responsibility; and who is concerned to see that things 'go' by cooperatively working in the community's interest."

Frank is now studying at the Cobleskill Agricultural and Technical College in animal husbandry.

Allen J. Blough, Washingtonville (New York) High School, and who also took agriculture at Orange County Occupational Center, Middletown, completed four years of vocational agricultural training. His father gave him his first calf, a Brown Swiss, and he joined the 4-H club and remained with it for seven years. By the time he was old enough to join FFA (in his sophomore year at school) he owned four registered Brown Swiss.

Allen has won the DeKalb award twice and the dairy farming award (and with it a free breeding service). That same year he also won the activity contest of his chapter, and with his father's help purchased six registered Jerseys.

Now, Allen is the owner of ten milking cows and seven heifers, is a member of the Brown Swiss Breeders' Association and the American Jersey Cattle Club. On graduation, he took over a second farm owned by his father.

Red Lion Area (Pennsylvania) High School named **Carl Criswell** for the Foundation Award. Carl had swine breeding and beef fattening projects during his four years in vocational agriculture, which were carried out very successfully. His teacher, Mr. John G. Myers, describes Carl as showing a great deal of enthusiasm, interest and leadership in the promotion and support of agriculture. He has done a lot of exhibiting and taken numerous prizes, been chapter president, and held other offices in the FFA.

At **Bellows (Vermont) Free Academy George Bryce, Jr.** was chosen for the Foundation award because he was an active member in good standing through the four years of vo-ag and FFA activities. He was born and raised on a local dairy farm, and because his Dad did work off the farm, responsibilities for the farm operation rested on George's shoulders during his high school career. He has developed many skills, both managerial and operational, which have led to a $3000 ownership value at present.

The Distaff Side

Irene Pompper, Bridgeton (New Jersey) High School, had two years of vocational homemaking. Her grades were excellent, she was an active member of the FHA, and won second place in the cooking contest. She also was a member of the FHA cast which wrote and presented a Thanksgiving play for the school assemblies. During the summer Irene worked at a migrant camp and in a day care center for SCOPE. She is attending Lyons Institute of Medical Technology for training as a pediatrician aid.

Margaret Simmons, Belfast (New York) Central School, believes she should produce before receiving, and has worked very hard to achieve her determination to graduate from high school and become a nurse. Margaret's teacher, Mrs. Ruth D. Taber, says: "Margaret is a very diligent, industrious, cooperative pupil . . . her attitude is incomparable."

At Hartford (New York) Central School, Mary Norton was a very good student and a good class leader. She carried out very valuable experiences at home in family relationships, and in helping with the younger children while her mother worked. When her father "moonlighted," Mary was there to help in the barn also.

Activities in FHA kept her busy with offices, programs, committee work. She is especially talented in art work, and was an outstanding home economics student

Loretta Brown, Marathon

(Continued on page 21)

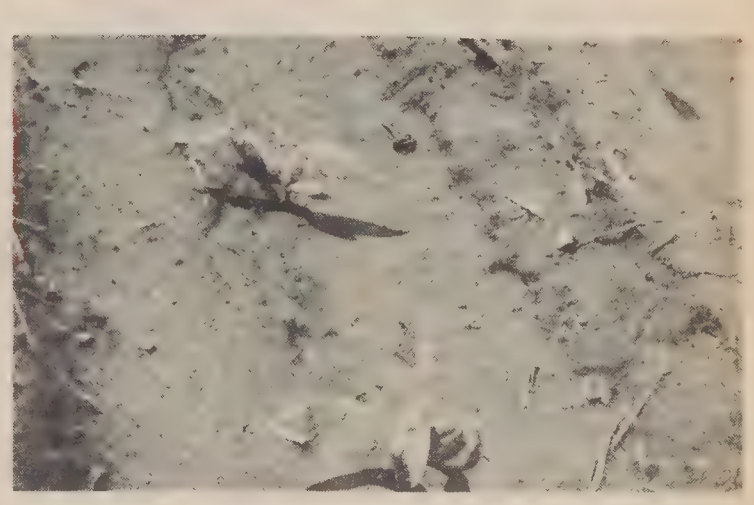
new "the grass-getter"

for field, sweet and silage corn

Beats annual grasses and nutgrass

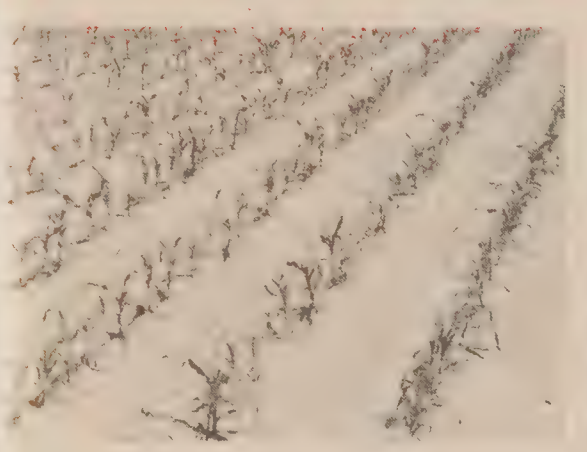
SUTAN® 6-E, a brand-new selective herbicide for corn, is applied and immediately mixed into the soil before planting to give maximum control. Control that begins as soon as soil moisture starts grass seeds germinating.

If your program calls for liquid fertilizers or soil insecticides, save time and money by applying both along with SUTAN. Certain liquid fertilizers must be checked for compatibility before use. See your Stauffer dealer.



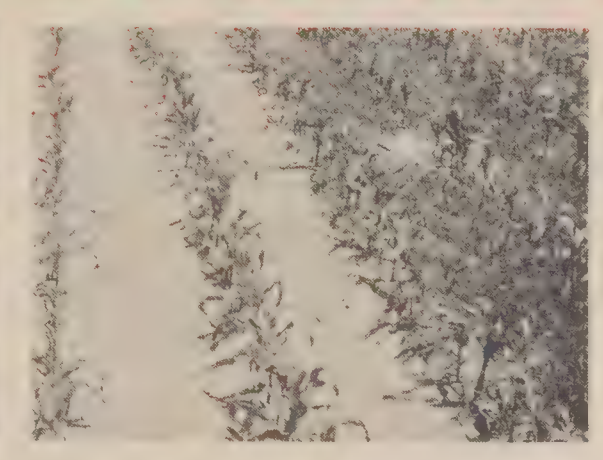
"The grass-getter" at work . . . controlling Johnsongrass from seed, giant foxtails, goosegrass, barnyardgrass (watergrass), nutgrass and more. Control like this means fewer cultivations.

Beats the weather... Beats harmful soil residue

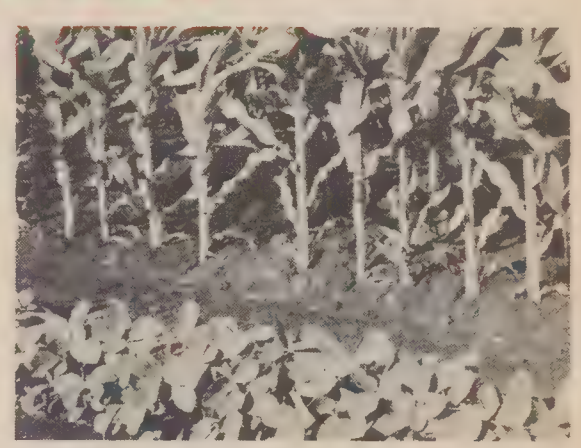


What's the advantage of incorporating SUTAN before planting? No waiting for hit-or-miss rainfall to move SUTAN into the soil. Corn gets in, off and growing without early season grass competition.

Let it rain . . . like it did in some areas during 1968. Even when you can't get into the fields to cultivate, SUTAN is working. And keeps on working where you put it . . . in the weed-seed zone.



Here's the difference SUTAN can make in your fields. Rows on the left are growing in soil mixed with SUTAN. No SUTAN on the right. Now you know why SUTAN is called "the grass-getter".



SUTAN, used at recommended rates, ends harmful carryover problems. Won't interfere with cover crops or rotation programs. Those soybeans are in soil treated with SUTAN the previous year. The corn is in soil with SUTAN.

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Tractor C	101.8 hp	2,352	3.9 more hp
Tractor D	95.0 hp	424	10.7 more hp
Tractor I	100.4 hp	774	5.3 more hp
Tractor M	94.0 hp	289	11.7 more hp
Tractor O	105.0 hp	1,800	0.7 more hp

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HOMETOWN

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CHANGE OF SEASON

In the dead of winter, I count the days until spring when the cows can be turned on lush pasture. It is the end of many months in the barn, and the tender green grass makes lots of milk easily and cheaply, so it's a time of year we await anxiously.

During the hot summer months when pastures start to dry up, cows will do likewise unless they have their bellies full, so I start longing for the day when the green forage is ready, when the cows stand up to their eyes in Sudax, or eat at bunks full of greenchop. They eat so much they can hardly waddle, and of course they milk accordingly.

Then we wait until the haying is done and the cows can go on afterfeed. Broad meadows with second or third-growth alfalfa keep the milk buckets full and the cows contented. But then I get impatient till the corn is ready to chop. I and the cows are happy again, 'cause I feed them till they beg for mercy. There's nothing like corn silage to make the cows come home and make the milk!

When the weather gets cold, I am anxious to get the cows indoors off the cold ground and muddy fields, where there is plenty of tender hay to eat, and nothing to do but lay down and concentrate on keeping the old udder full.

Then it's the dead of winter again, and I count the days until spring, when the cows can be turned out to lush pasture! — *Seaman Richmond, Hobart, N.Y.*

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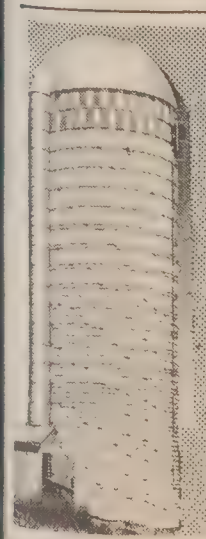

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LEST WE FORGET

In America it seems to be a generally-accepted virtue that so few can feed so many. The vast decline in farm population during the past fifty years spells success to the economist whose sights are trained only on production. To me, however, it spells something quite different. I return from a drive in the countryside, despairing of the vacancy signs which are everywhere present. A sharp nostalgia creeps into my thinking. The land too often seems a little lonely and forgotten.

True, there are a few big outfits left, but that is what they are . . . outfits . . . agricultural factories, big business, probably successful business . . . but no longer representing the kind of social stability in which a great many more people once found satisfaction and fulfillment.

I wonder if this is what we really want for America? I wonder if this really represents true growth and national vigor? Is it not time for us to give pause, and consider more deeply what is happening to the hearts and minds of the people? Surely it must be evident to many that values are changing for the worse . . . that much of what has been the best in American life is being uprooted in the mad scramble for material gain. It may sound ridiculous to deny a certain progress, but everything points to the fact that we are losing ground when we abandon wholesale a way of life which has contributed so heavily to the mental health of both the individual and the nation.

This has come about, in part at least, because through the propaganda process our standard of values has been influenced to the side of material success. We measure all things by the yearly income, and we measure occupations by their freedom from physical labor. The general attitude would seem to be, "Never do anything by hand if a machine can do it quicker and better." Follow that policy to its ultimate, and it may turn out that the world of the future will be all brain and no body, with the loss of balance scarcely to be called a happy circumstance.

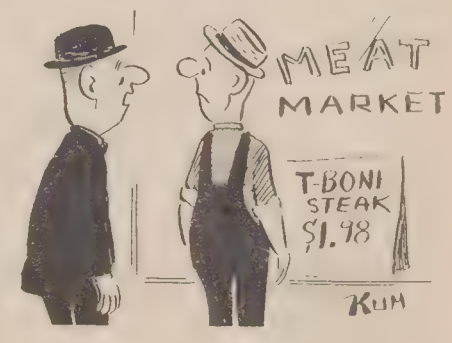
Nature has devised us as we are . . . a combination of brain and brawn. The nearer we can come to a natural fulfillment of these two elements the better will be our chances for a satisfactory existence. People become strong and nations become strong only when they are willing to clasp the hand of nature with every available resource. Today we are drowning ourselves in a sea of technology, where everyone gives in to the artful promises of a mechanical paradise. We need a re-awakening . . . a re-anchoring to something which is as real and beautiful as the soil itself. We need to grow close to that soil, both with our hands and our spirits. Our day is not done, as a people or as a nation, as long as we remember the land, from whence cometh our reward. — *Edwin R. Rice, Randolph, N.Y. 14772*

BULLDOZER

I have read with interest your editorial entitled "Goose Project." In 1965, the Dutchess County Board of Supervisors voted permission to the U.S. Army Corps of Engineers to survey the Wappinger's Creek basin near Pleasant Valley, in the belief that the Corps would come up with practical recommendations for flood control in the area. Result: a report by the Corps, in August 1968, that a thirty-to-fifty-million-dollar project be undertaken to control flooding, provide a water supply, and recreation. This would flood 4000 acres . . . and move out 400 families.

At a community-wide meeting when the Corps' report was presented, twelve hundred residents attended. A spokesman at the meeting who opposed the project asked for a "stand-up" vote by those who **favored** the project, and 13 voters stood up. This showing of solidarity by the Pleasant Valley community stopped the project . . . we hope for all time! Let others take heart!

The all-powerful Army Corps can bulldoze over just about any citizen who stands in their way when the eminent domain law is riding with them. Let's unite all farm organizations to change this archaic law. We will find friends to help us in all walks of life. Fair is fair! — *Murray Wigsten, Pleasant Valley, New York.*



"A dollar ninety-eight a pound! You farmers sure have it made!"

DOC METTLER COMMENTS ON

ACETONEMIA

The author is a practicing veterinarian at Copake Falls, New York

REGARDLESS of what the groundhog sees when he comes out on February 2nd, a dairyman in these cold northeast states knows he can count on some real winter weather between now and the first green grass. He also knows that even though he doesn't use pasture as such, the hardest time on his cow's health is going to be during the next ten weeks of changeable weather.

There was a time when this problem seemed insurmountable. It seemed as though every cow that freshened during the last few weeks of barn confinement got sick with something, usually acetonemia. Today on most farms acetonemia, although still seen, is not the "bugaboo" it once was. Yet some farms still have acetonemia problems, the cows that "just don't get better." Why?

The best answer I can give is that most dairymen began to realize that acetonemia is not a disease in itself, but a symptom that something else is wrong. There may be such a thing as a "primary acetonemia" in cattle. But deep down inside I feel that if the truth were known (and when a veterinarian tries to make a diagnosis he is seeking the truth) somewhere or somehow this cow had been exposed to stress, causing her metabolism to alter in such a way that she retained ketone bodies in her blood and urine, and she began to show acetonemia symptoms.

A Few Facts

I am not going to try to go into the technical explanation of acetonemia. What I should like to do, however, is state a few facts that have been proven about acetonemia by the observation of many experienced bovine veterinarians and good cow men.

A few days ago my partners and I were moving some metal drums about in our storage shed. We discovered that we had a large supply of propylene glycol left from last year. One partner remarked, "You know why we don't use that up any more? The cows that used to get that were the ones we called chronic acetonemia. Now we operate on them instead of dispensing glycol."

This is true, but it has happened so casually that it took that extra drum of glycol to remind us of it. Glycol has its place along with all the other supportive treatments and preventives of acetonemia, but I wonder how many thousands of gallons of it are wasted on undiagnosed cases of misplaced abonasum. Any cow that still has an acetone reaction or isn't eating and milking better after three days of conventional acetonemia treatment needs rediagnosis.

Let's start at the beginning. What are the causes of acetonemia as a bovine practitioner sees them? Stress and infection are the common ones. Perhaps the stress has already been corrected. If such is the case, and the cow has nothing else wrong with her, one of the cortico-steroids in small doses and plenty of feed when she starts to eat should snap her out of it. The stress to cause such a case could be from a case of diarrhea, a slight change in feed, not enough feed to compensate for milk production, a cold rain, or any of a hundred other things.

When you call your veterinarian to examine a cow with acetonemia, what is he looking for besides reactions to the test for ketone bodies in the urine or milk? First he checks the cow's temperature. Acetonemia itself does not cause an elevated temperature. He listens to her body sounds to check for hardware or peritonitis, misplaced stomach (either right or left displacement), penumonia, perecarditis, or heart trouble.

Then he may observe and question. What are her bowels like? Do they change from day to day? How long has she been off feed, and to what extent? Does she stagger when she walks? Has she had a discharge or retained placenta? Has she a history of acetonemia each year?

The veterinarian will probably handle her udder, and may check the milk for abnormality. A rectal and vaginal exam may be made to check for uterine infection and/or urinary tract infection. A high percentage of cows with acetonemia have uterine infection, and I have seen cystic cows that would not clear up from acetonemia till the cystic condition was treated.

A cow with acetonemia that is extremely constipated often will respond faster if she is dosed with milk of magnesia. If she has a subnormal temperature and/or staggers she may need an intravenous of calcium solution. In a few cases such as this I have seen cows go into shock and die either during or shortly after treatment. Why this happened I do not know, but all drastic treatments on acetonemia cows must be done with care.

As far as misplaced stomachs are concerned, it may be necessary for your veterinarian to examine the cow daily for three or four days until he is sure of his diagnosis; on others he may spot the bulge of the misplaced stomach from ten feet away. When someone comes up with the cause or causes of misplaced stomach, he may also tell us why we have a lot of vague "off feed" symptoms in cows with or without acetonemia reaction.

Prevention

To prevent acetonemia, do everything you can to prevent abrupt changes and stress. Last fall one farm was feeding one brand of feed to its herd of stabled cattle and another brand to cattle that were loose-housed and milked in a parlor. Both herds were doing very well, both feeds . . . although from different companies . . . were pelleted and of the same analysis.

When they ran out of feed in the one herd on a weekend they switched both herds to the same brand of feed. Five cows out of thirty-five developed acetonemia within a three-day period. When the switch was made back to the feed each herd was receiving previously, three more developed acetonemia. I don't think a farmer who is feeding for maximum production can afford to feed a grain that has a changeable formula. For the same reason, I think it is poor practice to change brands of feed every time there is a price change.

If you have been diagnosing and treating your own acetonemia and are not getting results from treatment, call in your veterinarian. You might be surprised by what he'll find.

BETTER MILKING

Here are some recommended procedures for cleaning the milker vacuum line:

Use the stanchion hose to suck about two gallons of hot water with a small amount of washing powder into the stall cocks at the end of the vacuum lines. This wets the line and flushes away any loose contaminants into the sanitary trap. Remove the trap and dispose of the water.

If the vacuum line has not been regularly cleaned, use a weak lye solution instead of a washing powder solution. A 2-percent lye solution (a can of lye in about 4 gallons of water) is about the right strength. Draw enough of the solution to clean a section, starting at the stall cock nearest the pump. Move down the vacuum line, sucking the lye solution into each stall cock.

No Lye

As the lye solution runs through the line, be sure the trap is emptied before it becomes full. This is crucial, since serious damage will result if the lye solution runs over into the pump.

After the lye treatment, empty the trap and rinse the line by drawing enough hot water through it to remove all of the lye solution. Rinsing should be thorough because any lye left will corrode the line. Again, while rinsing, make sure you don't overfill the trap with water.

Never use the lye treatment if you have aluminum lines. Use a good acid cleaner instead.

Do It Now

If some milk has been sucked into the line during milking, clean out the line immediately by sucking cold water through the next stall cock away from the pump.

After each cleaning job, make sure the trap is emptied. Between cleanings, the trap should be kept empty and dry.

To help dry out the line, open the stall cocks at the end of the line and run the pump for a short time after cleaning is completed.

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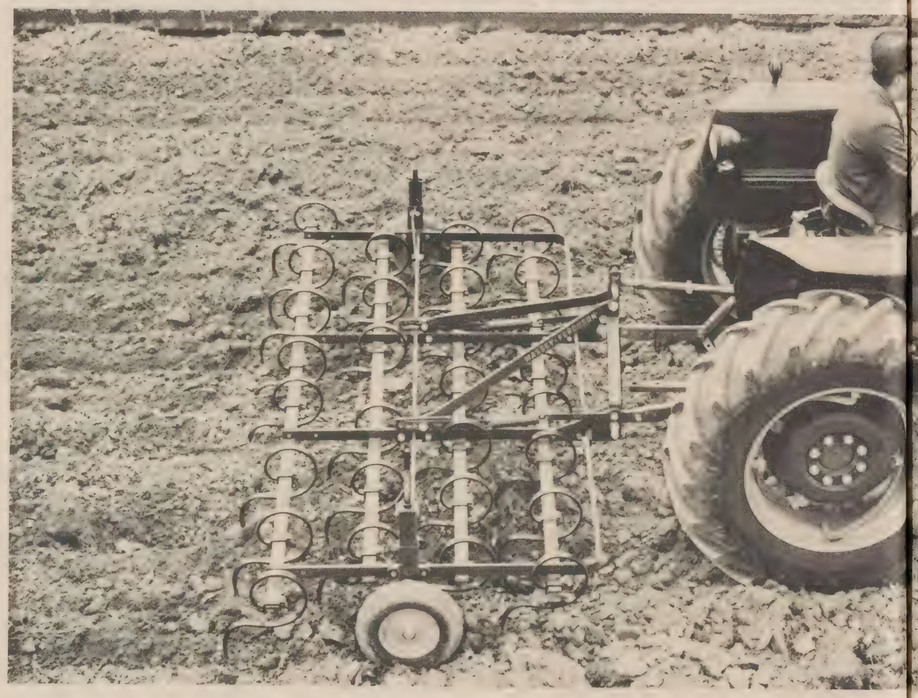
Show us any tractor or tillabfield in the Northeast. We've built a flexible tine cultivato match it.



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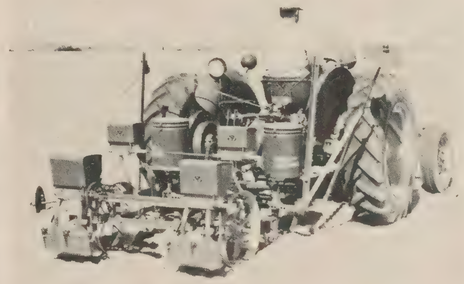
Do four jobs each trip thru your field with the MF 39 rear-mounte planter: exact placement of seed; fertilizer; insecticide; and herbicide If you are a 2 row man, order the MF 39; if you plant 4 row buy the MF 78



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REAL ESTATE BY CONTRACT

by Hugh Cosline

THE SALE of a farm presents problems to both seller and buyer. Most rules have their exceptions, but in buying or selling a farm one rule should be strictly observed . . . each party, buyer and seller, should be represented by a competent lawyer. The money you might save by failing to have a lawyer may be lost later many times over.

For many years most farms were sold by accepting around half the purchase price, and taking a mortgage for the balance, usually with certain defined dollar payments on the principal each year. During times of depression, with consequent disastrously-low prices for farm products, this brought a tremendous hardship to thousands of buyers, and in many cases resulted in foreclosure and loss of the farm.

More recently, selling farms on contract has become more prevalent than was once the case, and the method has distinct advantages for both parties. There are also disadvantages, and some pitfalls to be avoided.

Confidence Important

From the seller's point of view, confidence in the buyer is extremely important. Confidence is also important when a farm is sold and a mortgage assumed, but in the case of a contract there is usually a smaller down payment (average around 21 percent). The purchaser can actually cause serious damage to a farm by unsound cropping, by neglect of animals, and by selling timber, unless the contract forbids it . . . and the buyer lives up to his word!

This need for confidence makes sale by contract an especially-desirable method of sale by father to son. Often the parents continue to live on the farm (in their own house) and the regular payments provided in the contract serve as an annuity which can be used for living expenses.

And there is another important financial advantage. Income taxes on the sale price will be less if payments are spread over several years rather than paid in a lump sum. However, certain provisions must be observed according to the laws of the state in which you live, as well as federal tax regulations.

The Internal Revenue Service requires that no more than 30 percent of the selling price be paid in the year of sale, and that a minimum of 4 percent interest be charged . . . if the deal is to qualify as an installment land contract.

One of the big advantages from the buyer's point of view is that he can acquire management of a farm, and eventual ownership, reasonably early in life, before he could possibly accumulate enough capital to make a down payment of half the sale price.

This capital-acquisition roadblock has grown rapidly as the capital required to own and operate a modern farm has greatly increased, to the point where an investment of $100,000 is by no means uncommon in the Northeast.

The actual agreement or contract will vary on each farm, but here are some items that should be carefully considered and spelled out definitely in the contract:

1. What happens should the buyer default on his payments?
2. When will legal title actually be transferred? (This is commonly set at the time half the purchase price is paid. In the interim title remains with the seller).
3. Should the buyer be permitted to make payments more rapidly than specified if he wishes? (The seller may not want this to an extent that will move him up a notch or two on the rack of income tax brackets).
4. If buildings burn, can insurance money be used for replacement?
5. Should cutting timber be permitted? If so, how are the proceeds to be divided?
6. If improvements are made in buildings by the buyer, how is he protected in his investment?
7. Are the specified payments realistic? Can the buyer be confident that he can meet them? (One of the most common mistakes by purchasers using land contracts is to agree to unrealistically-high payment terms).

In addition to those mentioned, there are other advantages and disadvantages to consider. From the seller's point of view a sale may be quicker because a buyer needs less capital. However, the seller should consider whether or not the specified installment payments will be large enough to cover his needs. Also, the seller has quicker recourse than when a mortgage is accepted, because it is simpler to repossess a farm sold under contract if the buyer should default on his payments.

One of the big benefits to the buyer is that in most cases he can use available financial resources more profitably as operating capital in the farm operation than if it is tied up in real estate.

The use of land contracts is likely to increase. The only caution we suggest is that a contract not be written hastily, and that all possible angles be covered . . . this after full consultation by both buyer and seller with their own lawyers.

AA Foundation Award . . . .

(Continued from page 14)

(New York) Central School, as president of the Future Homemakers of America chapter has been responsible for many of the chapter's worthwhile projects, such as adopting a foreign orphan and "spring cleanup" in the village. She is, according to her teacher, "a leader who doesn't command but cooperates and gets cooperation from her peers. She rates A-1 for citizenship."

Arleeta Usher, Trumansburg (New York) Central School, had three years of home economics, was an active member and officer in the FHA, and won honors in her 4-H activities. In addition to a very full schedule, she worked on Saturdays doing cleaning for people in the community. She was chosen for the Award because of her qualities of honesty, dependability, self-reliance, and cheerfulness. Arleeta is now attending the Agricultural and Technical College at Morrisville, where she will major in food science.

Kay E. Kreitz, Gettysburg (Pennsylvania) High School, swept top Future Homemakers Awards on the Parents' Night banquet. She was named "Betty Crocker Homemaker of the Year," scoring in the top 10 among 633,798 girls in 15,079 high schools who participated in the examination. In addition, she received the Crisco gold trophy for outstanding work in home economics, as well as the American Agriculturist Foundation certificate for achievement and good citizenship.

Cheryl Schoenfeldt, North East (Pennsylvania) High School, was our **Girl-of-the-Year.** Says Mrs. Rainesale, teacher of home economics: "I have seen Cheryl progress from a shy clumsy teenager into a charming, poised, accomplished young lady. Her home economics skills are particularly outstanding. She has participated in athletics, Latin Club, Liberal Club, Model United Nations, FHA Ways and Means Committee, and has been active also in the church youth group and as Outer Observor in the Rainbow Girls.

"Cheryl is conscientious, hard-working, loyal, and enthusiastic in her tasks."

At present Cheryl is training to become an x-ray technician, and we are happy to have been able to help her develop her ambition.

At **Warren (Rhode Island) High School** the teachers had a difficult time deciding between two students, both excellent in every way. Both scored at the top of the classes in home economics, and performed with superior ability in clothing construction and food preparation laboratories. Their attitudes were praiseworthy, and both were good cooperators.

The final decision went to **Nancy Castro** because of the time, effort, skill, patience, and kindness which she expended on teaching simple sewing and cooking skills to a special class for retarded children at a nearby public center.

Maxine Dubuque, chosen for the Award at the **People's Academy, Morrisville, Vermont,** was the third-highest ranking student in the senior class, and active in sports, musicals and dramatics. In addition, Maxine worked to earn money to further her education. With her mother working out, she helped with the housework, was a student council member, assistant editor of the yearbook, and president of her church youth group. Maxine is dependable, a good organizer, and works well with other students.

The records of some of these winners make it difficult to believe that young people could accomplish so much while still in high school. We are proud of them all . . . and of their teachers . . . and feel every confidence that they will continue to be successful and helpful citizens of our country.

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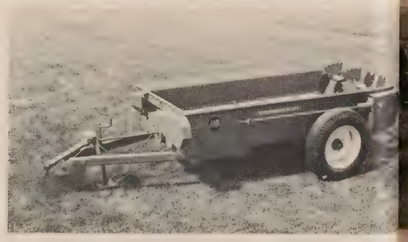

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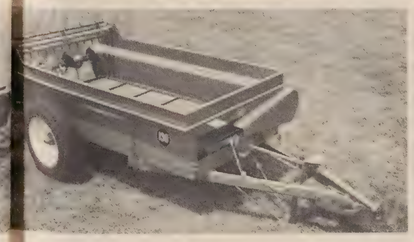

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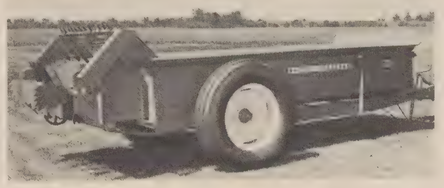

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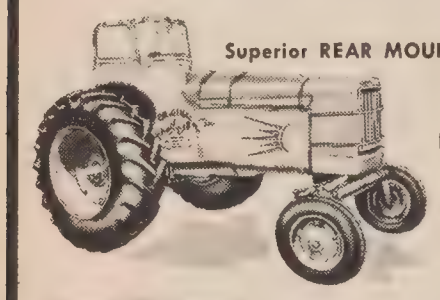

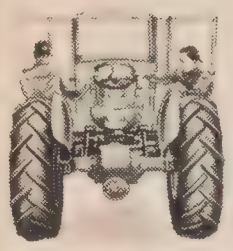

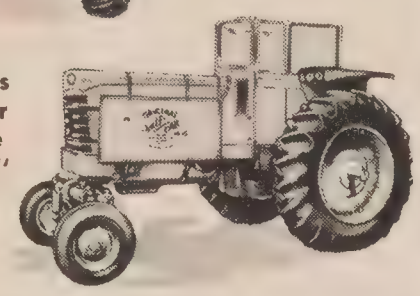

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by Bob Cudworth

HE BATS .754

Top quality hay is probably the key part of Henry Hoysradt's dairy feeding program.

Once a professional baseball player, he's now a top dairyman . . . . .

"I'm fussy about hay, and keep good hay in front of those cows every single day. To my mind nothing determines a cow's production more than the quality of the hay."

That's according to Henry Hoysradt, Ancramdale, N. Y. who had a DHIC herd average of 19,059 lbs. of milk and 754 lbs. of fat for his 44 cows this past year. It was one of the highest averages in New York State.

Mixture

"We have our best luck with an alfalfa-bromegrass mixture, and concentrate on producing just as good quality hay as possible. A new bale kicker helps us to harvest hay quickly when it's in top condition. We have several storage places, so we can keep the best quality hay separate from the hay that's only fair. And when we have a bale that's musty or not up to snuff it goes to the heifers, or for bedding. We don't attempt to palm it off on the cows!

"Another thing we're pretty particular about is doing things the same way every day, because cows are certainly creatures of habit. That was impressed on us quite strongly three years ago when we moved the cows into this new barn and some of them had all sorts of trouble getting adjusted to larger stalls."

The new barn, of steel construction, with a pipeline feeding to a 600-gallon bulk tank, is of special delight. It has been a real time-saver even though the herd was increased from 24 to 44 milkers when the move was made.

"Two of us get the milking done in an hour now," Henry points out. "One person handles four milker units, the other washes udders ahead of him and handles other chores."

Even though he pays close attention to details . . . and the results show it . . . Henry feels it's important to have some fun in life too. He bowls two nights a week (generally averaging in the 180's) and often spends an hour or two hunting foxes.

A former baseball and basketball star at nearby Pine Plains high school, he played professional baseball . . . getting as far as Class A ball with the Binghamton Triplets. He was an outfielder, and was known as "Pat" Hoysradt . . . a nickname that still sticks.

He gave up baseball in 1940 and returned to the farm owned by his father, who was also a mail carrier. There have been Hoysradts on the present farm since 1750 and Henry's two boys are the 8th generation.

Of the 500 acres now owned by Henry, about 220 are tillable. He has 40 acres of pasture, 60 acres of meadow, and 50 acres of corn.

"With our new 20×60 silo we have enough silage for the whole year. We prefer corn silage to grass silage, although we might find that haylage would be all right.

"We feed silage twice daily — giving each cow some 50 pounds a day. We use a silage cart and can do the feeding on each side in about two minutes.

"Hay . . . some 15 pounds per day . . . is put out three times a day.

"As for grain, our top cows get about 22 pounds a day. The ration is made from our own corn and oats, mixed with distillers' grains, soybean oil meal, molasses and a 32 percent protein supplement for a 16 percent protein feed. When we run out of our own grain we purchase a 16 percent ration.

"Another thing we're sort of particular about is our dry cows. Our dry cows are in the barn along with the rest of the milking string . . . not out in a back lot somewhere. And we give them six pounds of grain a day to keep them in good condition.

Culling

"How do we handle our culling? Actually we've had to buy cows since moving into the larger barn — so haven't culled as closely as we ordinarily might. I like to see first-calf heifers come in with 550 lbs. of fat at least . . . and since our butterfat test average is about 3.8 percent we don't like to keep low testers.

"Our cows are all bred artificially. We've had pretty good luck with the cows we've bought, but not 100 percent success, and there's at least one we won't breed again.

"When we planned the new barn, we considered the possibility of putting in free stalls and a milking parlor. I'm glad we decided to go to our present set-up of stanchions and tie stalls with an around-the-barn pipeline milker. I think it's awfully important . . . from both a production and health standpoint . . . to be able to keep close tabs on the cows, and that's certainly easier to do with this arrangement."

The steel-paneled barn was constructed 40 feet wide — a little wider than actually needed — in order to provide plenty of working room in front of the cows. It is 112 feet long and has plenty of room available for adding on if needed.

A ventilating fan is kept going most of the time to provide air circulation, but 6 inches of insulation in the ceiling and 3 inches on the sides help to keep the barn warm on unusually-cold days.

This past year was the first time Henry Hoysradt's herd has been over the 700 lb. fat level, but was the eighth consecutive year it has exceeded the 600 lb. fat level. That's pretty good indication he's doing a lot of things right!

DAIRY GOALS

There were 548 New York dairy farms included in a 1967 business summary prepared by farm management specialists at Cornell University.

These farms averaged a labor force of two men, had 51 cows and 33 head of heifers. Total investment per farm was $92,000 (an average of $46,000 per man); total receipts amounted to $44,309 annually. The average labor income per operator was $7,511 . . . ranging all the way from **minus** $7,300 to **plus** $31,000!

Production rates included 12,100 pounds of milk **sold** per cow, 2.6 tons of hay per acre, and 17 tons of corn silage per acre. Pounds of milk sold per man averaged 324,500. The amount of milk sold per cow, and milk sold per man, showed close correlation with the level of labor income.

Average cost of fertilizer and lime per crop acre in 1967 on these 548 farms was $12, and the annual vet bill per cow averaged $10. Electricity per cow amounted to $10 . . . less than taxes per cow ($17).

Empire Staters can get all the information from this farm business summary by asking their county agents for A.E. Res. 269 . . . or send for a copy by writing: Department of Agricultural Economics, Cornell University, Ithaca, New York 14850.

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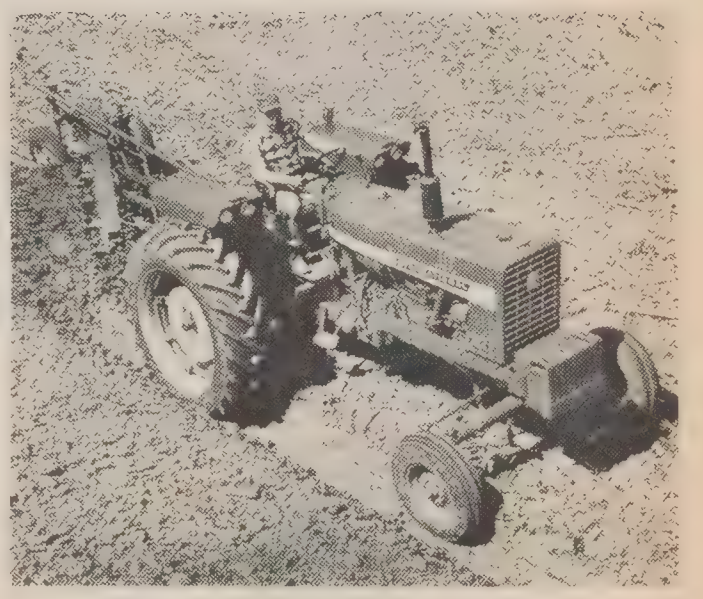

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Gardenwise...

WHAT'S NEW AND BETTER?

by Isa Liddell

NORTH AMERICA is garden-minded. With more spare time, but over-crowded highways and recreation areas, it's no wonder that gardening is the greatest of all hobbies, one in which the whole family can take an active part. It can add real values to home life.

To help encourage this gardening spirit, plant breeders from around the world work long and hard, creating better, higher-quality, more-useful varieties of vegetables and flowers. Most of them are easily and cheaply grown from seeds. What is more appetizing than vegetables picked just in time for dinner . . . not to mention the added vitamins!

Vegetables lead this year in the All-America awards with a Gold, a Silver, and five Bronze medals. The gold was won by the new hybrid broccoli **"Green Comet."** It is extra early, with large-sized heads of small tight beads or buds, of excellent quality. It is desirable for early and fall maturity.

Silver medalist is the hybrid cabbage **Stonehead,** an exciting new, extra-early, small-sized, extremely hard-heading cabbage. Especially good for home gardens, or for the icebox when bought in the markets. Along with the small core and solid head, Stonehead permits closer spacing, more heads to the row or per acre, good flavor and quality in the quantity yields. It's extremely attractive, too, with rich blue-green outer leaves.

Another cabbage took one of the bronze medals, **Harvester Queen.** This variety has large globe heads and medium earliness, with especially-uniform size, and dark blue-green outer leaves. It holds well at maturity without bursting, has good flavor and quality. It is believed 100 percent yellows resistant. Although it might be considered a bit large for home gardens, it is excellent for processing and ideal for kraut.

Hybrid turnip **Tokyo Cross,** another bronze medal winner, is rather unique. It has a very early pure white, medium-sized, semi-globe, smooth, excellent-quality root. Uniformity, vigor, high yields, and long standing characteristics are found outstanding. With large cut-leaf, medium-green leaves, it is a short top variety, but the greens are highly satisfactory in flavor, tenderness, and yield. It can be used with small earliest roots, or left for larger size without pithiness, and is suitable for market use as well as sweet and tender for the home garden.

Cauliflower **Snow King** is reported as from 10 to over 24 days earlier than other Snowballs, shorter plants, with rich creamy white curds. It has uniform heading for harvesting, very short stems, and reported by one judge as very heat tolerant. Its great advantage is extreme earliness.

Another bronze mdal went to summer bush squash **St. Pat Scallop,** an improved, bell-shaped, greenish-white version of the Patty Pan squash. St. Pat is very early, continuous bearing, uniform, prolific, of excellent quality. The compact bush needs less garden space, and provides more fruit over a long season and heavier yields if kept picked.

And the fifth bronze medal went to winter squash **Kindred,** a short, semi-vine type of Buttercup shape with deep orange-colored flesh and gold skin. More productive, of superb quality and appealing appearance, both home and market gardeners can appreciate the more concentrated yield on vigorous short vines. Fruit is of medium size, about 3½ inches and 6 to 7 inches wide, weighing 3¼ pounds...some with a small turban and quite decorative. The flesh is about one inch thick.

How to Choose

With so many varieties to choose from . . . early, late maturing . . . differing growth habits . . . some more productive, some weather and disease-resistant . . . some tender, juicy, sweet, of superior flavor and quality . . . what is the average gardener to do . . . how choose wisely?

Of course, you'll first of all

(Continued on page 25)

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FARM CREDIT SERVICE

The Question Box

. . . Send us your questions – we'll get the answers

My strawberries are always bothered by snails during the harvest season. How can I control snails?

Visit a garden store and purchase a prepared snail bait. Spread this bait lightly through the strawberry planting in the early evening before the fruit starts to ripen. If you wait to use the bait until the fruit is ripe, it is likely that snails will prefer the strawberry fruit to the snail bait.

Do strawberries need lots of water?

Water is the real key to a large strawberry crop. From the period of bloom to end of harvest the strawberry plant will use about 1 inch of water per week. They should be watered by irrigation or rain at 3 to 4-day intervals during this period. — *Prof. John P. Tompkins, Cornell University.)*

When should strawberries be irrigated? Does it damage them to irrigate during full bloom and/or during the middle of the day?

Apply the water at a time most convenient for you. Commercial growers will irrigate 24 hours a day by moving equipment from one field to another. You will not harm the blossoms or fruit by applying water during the hot or sunny portion of the day. If convenient, it is desirable to irrigate during the day whereby the foliage can dry before darkness . . . this tends to prevent the development and spread of fruit rots. — *(Prof. John P. Tompkins, Cornell University.)*

My red raspberries were nice for several years, but last summer the fruit was very small and almost worthless. What causes this condition?

The plants were likely damaged by a soil-borne virus disease. Destroy all plants, and set a new planting on a different site. Planting healthy plants in the same row will be a waste of time and money . . . the new plants will likely pick up the disease from the infected soil.

Neither my currant nor my gooseberry bushes are very productive . . . they have a mass of canes and leaves. What should I do?

Prune the plant to 10 to 15 canes, fertilize with a bushel of manure per plant, and two large handfuls of good garden fertilizer. Be willing to accept a low yield this year, and expect a yield of 4 to 10 quarts per plant the next season.

Better . . . . .

choose the family favorites . . . then try some of the new ones for fun. Even the old-established varieties are constantly being improved . . . that's why we call them **new** varieties.

That's where the All-America selections can help. There are 26 vegetable trial locations over North America where proposed new varieties are grown alongside the best similar kinds already in use. Really-outstanding new creations are chosen as All-America Selections . . . and seeds are available through all reliable garden and seed stores. Let's look at their list for 1969 (in addition to the ones already mentioned):

Bush Beans . . . Snapbean Executive
Bush Lima Fordhook 242
Beets . . . . . Ruby Queen
Cabbage . . . . . Savoy King
Cantaloupe . . . . . Samson
Carrot . . . . . Gold Pak
Sweet Corn . . Golden Beauty (early)
Iochief (Main crop)
Cucumbers . . . . . Spartan Valor
Endive . . . . . Batavian Full Heart
Lettuce . . . . . Buttercrunch
Salad Bowl (Loose leaf)
Mustard . . . . . Greenwave
Okra . . . . . Clemson Spineless
Onion . . . . . Yellow Valencia (Sweet Spanish)
Parsley . . . . . Paramount
Pea . . . . . Freezonian
Pepper . . . . . Bell Boy
Radish . . . . . Cherry Belle
Spinach . . . . . America
Squash . Prolific Straightneck (early)
Chefini
Hercules Butternut (winter)
Tomatoes . . . . . Spring Giants (wilt-resistant)

Dream Your Dreams

It's fun to study the catalogs during the dark winter months, hoping against hope that one can grow vegetables as perfect as the pictures shown therein. But be your project simple or detailed, small or large, it's fun to garden.

If you want to get an early start, set seeds in a cold frame . . . or on an enclosed porch . . . and think of all the plants you'll have to give away to your neighbors!

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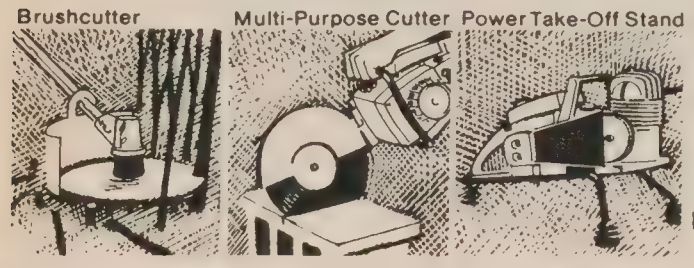

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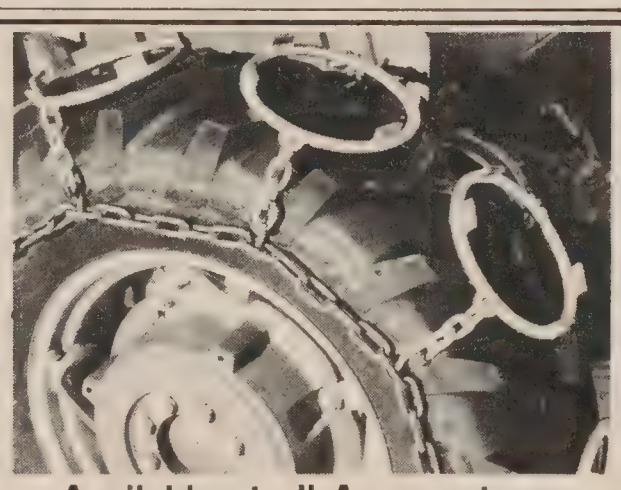

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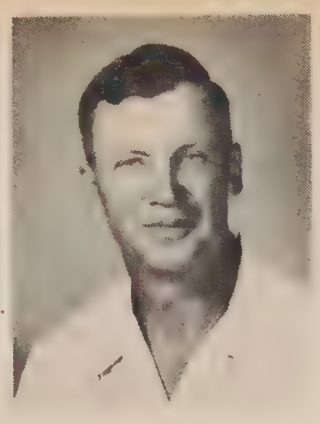

Gayway Farm Notes

by HAROLD HAWLEY

ENOUGH IS ENOUGH

How much is enough fertilizer? Everyone knows that there comes a point beyond which more fertilizer will not make any more money for the user. He may still get more crop . . . but not more profit. Where is the point for each crop on each farm?

A friend farming irrigated land in eastern Nebraska thinks he can pretty near tell where this optimum level of fertilization is for his fields. Of course, he holds one of our biggest variables almost constant . . . his water supply per crop acre is subject to control.

With the water supply known to be adequate for the coming season, he can fertilize heavy for very high yields and at least be assured that water won't be the limiting factor. Under these conditions it is good business to feed his crops very heavy.

With our rainfall so variable, it's not quite so clear that everyone should feed his crops real heavily. Certainly a dry year will mean that quite a bit of fertilizer will be unused.

It's our guess that before going all out for top yields several things should be done before ordering the fertilizer. It's a cinch that fertilizer won't pay for itself unless lime needs are met and drainage is adequate. Right after drainage, we think control of surface water and run-off is of real importance.

Run-Off

Naturally, run-off water will grow no crops on the field where it fell and, equally important, it may carry off a lot of good fertilizer as well as topsoil. We're strong on working the land across the slopes, but of more importance under our conditions is to not work the soil too much. It's absolutely amazing to see how much water can be held where the ground is disced only once to leave it loose as we plant. On the headlands and anywhere else that the soil gets run over and worked excessively the run off will be many times greater.

There is no widespread agreement on this point, but we feel that fertilizer which is plowed down, at least in the case of corn, is more apt to make us money than if disced in, sprayed on, or put beside the row. Since we have been following this practice we have had two dry spells during which the corn seemed to keep right on growing, the theory being that fertilizer put that deep gets the roots down where the moisture is during a dry spell. Also the fertilizer is available to the plants if there is moisture to get it into solution. We find ourselves going more and more toward a plow-down program for corn fertilizer, with correspondingly smaller applications through the planter. This also speeds up the planting operation.

Another of the things which possibly is as important in pushing up corn yields as more fertilizer is getting the seed in early. We've never been able to finish up as early as we'd like, and it's usually not hard to detect yield differences between our early and late plantings.

Then, after all the proper steps of seed placement, plant population, and weed control have been observed may be the time to get more money from additional fertilizer. Certainly all these things must be done about right if one is to show a return for additional investment in plant food.

Of course, even then a severe dry year may not be the best one in which to use maximum fertilizer application. Not knowing about the weather ahead of time most of us will be the perennial optimists, expect ideal weather, and fertilize accordingly.

TAX DOLLARS

At one time or another we've all seen some pretty inefficient operations. We've also seen some mighty unproductive work sessions where for one reason or another mighty little was accomplished. It's long been our hunch that few excelled the state highway department crews for sheer inefficiency. The work output per taxpayer's dollar gets pretty near immeasurably small. The last few days have produced the ultimate . . . a new all-time low in non-productiveness as far as we are concerned.

Get the picture. Repairs needed on a bridge over the river which necessitated one-way traffic. On each approach to the bridge was a man with a walkie-talkie so they could communicate with each other to control the traffic. One man used his walkie-talkie and flagged down traffic and handled his end alone . . . that is, all except for the relief man sitting in the nearby truck. On the other approach, the walkie-talkie man was a specialist. Another man waved the red flag. I'm not sure what function the third man was supposed to perform. So now we total five men controlling traffic, not to mention three trucks with blinkers.

Two men seemed to be occu-

(Continued on next page)

pied with work relating to bridge repairs while two more just seemed to be occupied. Then we noted the foreman chatting with someone. So all in all, nine men were drawing pay. Made one think that maybe a private contractor could have got fat on the job even if he had done it for half what it cost to have it done by the crew that was used.

I don't really mean to be overcritical. I just want to express my downright disgust that our tax money should be wasted in this fashion.

FILLING THAT VACUUM

If, as the scientists say, nature does in fact abhor a vacuum, it soon moves to correct the situation.

You will remember that the farm flock of chickens used to supply the roasting fowl. Roosters, both young and old, made up a big part of the holiday poultry back before turkeys became commonplace, economical fare . . . and back when there were still farm flocks of poultry.

When commercial poultrymen became the suppliers of poultry meat, they sold the birds light because that was the economical size to produce and market. Broilers became a big tonnage item. Fryers, when you could find them, were much smaller than the 5, 6, 7-pound young roosters we used to kill, dress, and enjoy from our own flocks. Heavy roasters, at least in our markets, became a non-existent item.

I'm not sure of the economics. Maybe it just isn't profitable to produce an 8 to 12 pound roaster . . . at any rate folks aren't flooding the market with them.

So along comes an enterprising neighbor raising meat birds, caponizing them, dressing them, and selling them at holiday time as fancy roasting birds. Sure, the price is above that for fryers or turkeys, but the meat is delicious, and there is no local competition for fresh-dressed heavy fowl.

For my money, this is an excellent example of someone meeting a need and getting rewarded for being so enterprising. Someone who can fill an economic vacuum benefits both his customers and himself. We've already ordered for next Christmas. So great has been the demand for this high-quality product that this year's supply did not meet the demand.

TOO CLOSE FOR COMFORT

It's been interesting to chat with people who had the problem of harvesting corn this wet, wet fall. As always, a lot of ingenuity has been called into play. Combines fitted out with rice tires on the drive wheel and duals behind weren't rarities. Neither were various kinds of half track arrangements. Even hydraulic motors to drive the rear wheels came in for a try.

For those using pickers, various combinations of two tractors were common, with the second tractor pulling the first if the picker was a pull-behind rig. If a mounted picker was used the second tractor may well have been used as a pusher behind the wagon.

As one man said, "It's a hard way to get corn harvested and a darn poor way to plow."

Narrow Rows

One of the unexpected things about all this working in soft ground was the additional problems associated with narrow rows. When the ground was merely greasy, both forage harvesters and corn pickers tended to pull a little sideways, especially if the land was not pretty level. This side draft feature made it terrifically hard to avoid harvesting waste. Likewise, it was difficult to keep both the harvesting equipment and the trailing wagon from wiping out the next row.

When the ground got wetter so that the tractors were rutting it up, it became almost impossible to keep from running over the next row or covering it up with mud. We had problem enough with 36" rows.

The experiences we observed and heard about this fall make one wonder if the narrow rows have a place for people other than those who harvest their corn with a combine. Certainly for those who chop it for silage and those who use pickers, the harvesting problems were enough to discourage even the most enthusiastic narrow row convert.

One thing we did finally learn was to buy a ⅜-inch cable some 40 feet long with loops on each end. It sure beat using log chains for towing out stuck rigs. By using a clevis on each end we could back up without having anything come unhooked as so often happened with chains. The real payoff came in handling a cable weighing about 10 pounds . . . much easier to drag through the mud and corn stalks than those heavy chains.

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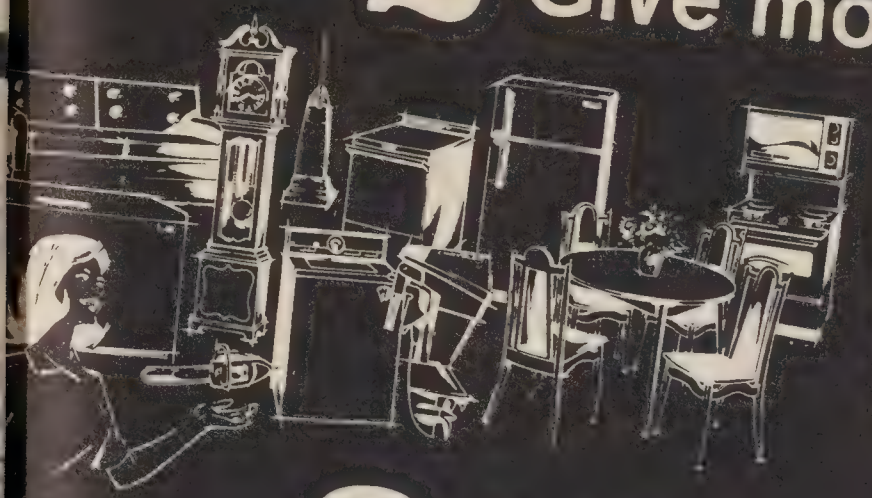

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LIVESTOCK

Feed Additive—Beef cattle researchers at American Cyanamid Company have developed a new feed additive for minimizing the effects of stress in cattle.

The product is Aureo S 700 . . . a combination of the antibiotic aureomycin and Sulmet, the latter a sulfa for livestock.

For the past three years, university and Cyanamid researchers have tested the new product. In 27 tests, at seven research stations . . . involving 1400 feeder cattle . . . Aureo S 700 maintained beef gains and reduced losses from shipping fever when compared to unmedicated conditioning rations.

Livestock Feeding—The bigger an animal gets, the more feed is needed for animal maintenance . . . and the lower becomes the proportion of feed used for added gain. Therefore, each pound of grain requires more feed than previous pounds, and the cost of gain rises. About two-thirds more feed is required to put on a pound of gain as the beef animal nears 1,100 pounds liveweight than was required at 600 pounds.

Furthermore, general feeding to heavier weights across the entire livestock industry can bring sharp price breaks, such as experienced in the fiasco of 1963-64. Heavier animals generally have wastier carcasses (extra fat trim) . . . so the higher cost gain is actually sold at a discount!

Hogs and lambs also show the same pattern of sharply-increasing feed requirements per pound of gain as animals are fed toward heavier weights.

Beef Study—A beef herd care and management course is now offered by mail from The Pennsylvania State University. It's for farmers keeping small herds of cattle and intentionally dividing their time between grain and forage crop production as well as livestock care.

For a discussion of beef cattle production problems, study the Penn State correspondence course . . . open to anyone in any state. Send your name and address with $4.65 to: Beef Production, Box 5000, University Park, Pa. 16802. There are no other charges, and a complete course copy comes to you by mail.

New Antibiotic — A new antibiotic, spectinomycin, helped pigs gain faster with improved feed efficiency in experiments reported at the last annual meeting of the American Society of Animal Science.

Similar results were obtained in swine feeding trials conducted by animal scientists at Purdue University, South Dakota State University and AMDAL Agricultural Research Center near Mundelein, Illinois.

Lousy Job—To control ticks and lice on sheep, Cornell entomologists recommend the use of Korlan or Diazinon in a simple sprinkler method. Crowd 25 head at a time in a small pen so there is just room to push your way through. Sprinkle 6 gallons of water mixed with insecticide over their heads, necks, tops and sides as you walk among them. Korlan rate is eight fluid ounces of 24 percent material per three gallons of water, and Diazinon rate is one-half ounce of 50 percent added to the same quantity of H-2-0. Check the label and follow its directions!

Horse Judging—Agway, for the third year, is sponsoring a horse judging contest in eleven northeastern states. Contestants of all ages will judge five classes of horses from a pictorial form. The form is available beginning February from local Agway stores and representatives and from many County Extension offices. Entries will be accepted until April 15, 1969.

New Weapon Against Parasites — Shell Chemical Corporation has come up with a broad-spectrum anthelmintic called "Equigard" which is reported to be a valuable weapon against internal parasites in horses. Equigard is an uncoated, grain-shaped resin pellet in which the active ingredient is dichlorvos.

It provides a controlled and sustained release of the active ingredient throughout the gastrointestinal tract, and under a veterinarian's supervision the feeding method of worming horses is easy and time-saving. Equigard is available only through licensed veterinarians.

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FORESTRY

Timber Agent – The New York State Forest Practice Board has a committee studying the "Timber Agent system" as presently used in New Jersey. Under this system, a State forest service forester marks and estimates the timber, and gives the results to the owner. A timber agent handles the job from there on, contacting prospective purchasers for bids . . . and following through to see that the timber harvest job is done as specified. Fee involved is 10 percent of contract amount.

The average small woodlot owner normally sells timber only once in a lifetime, and is unaware of the best way to go about it.

State District Foresters are available in New York to mark and estimate timber on private lands, but the sale of timber is the owner's responsibility.

Bulletin – Any New York State woodlot owner can obtain a copy of Cornell Bulletin 1125, "Managing Small Woodlands in New York" from his county agent. He can also direct you to the District Forester, who will help in marking trees that should be harvested, and in general assist with pointers on forestry management.

Big Group – There are 255,000 forest owners in New York State . . . with an ownership of 11 million acres. So reports the New York Forest Owners Association, an organization devoted to the economic and aesthetic objectives of forestry land owners.

A typical recent issue of "Forest Owner," a monthly publication of NYFOA, discusses the problems of getting a clear title to woodland . . . and tells of a membership "Woods Walk." Anyone interested should send for more information to: Floyd E. Carlson, College of Forestry, Syracuse, New York 13210.

Reverse Osmosis – The Agricultural Research Service of the USDA has come up with a new way of concentrating maple sap. Instead of boiling in evaporator pans heated with oil or wood fires, the new method removes water from the sap by mechanical means. The process of reverse osmosis (developed for obtaining potable water from sea water) has been adapted to maple sap, at a cost only 1/25th of the conventional boiling method. Reverse osmosis is used to remove 75 percent of the water from the sap; boiling is used for the rest, since this also furnishes the heat necessary to develop the maple flavor.

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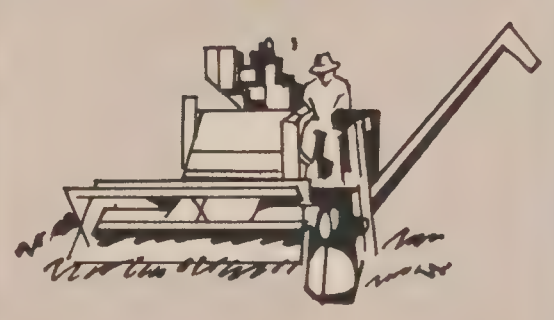

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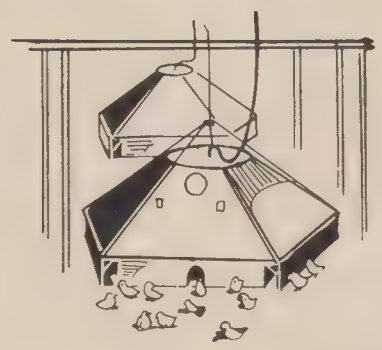

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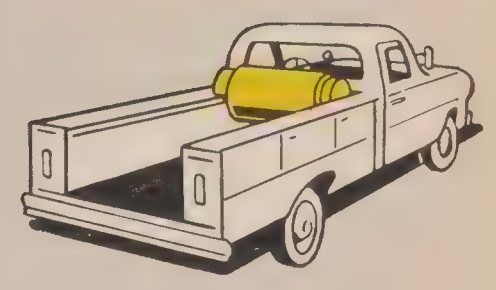

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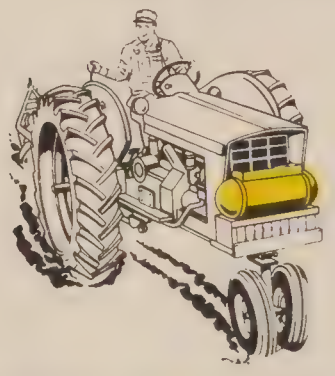

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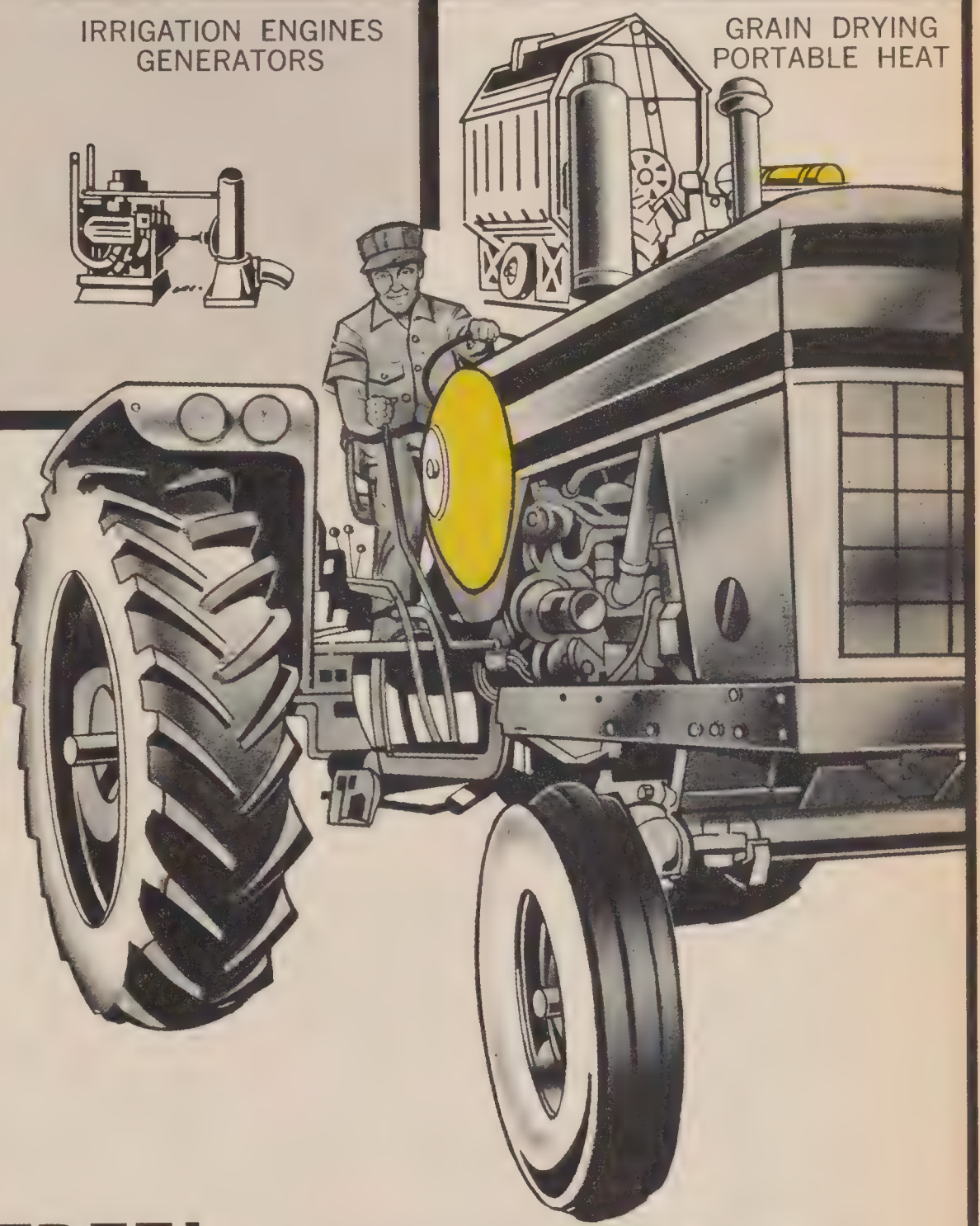

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THE REDKOTES ARE COMING!

Seed production of red kidney beans is staging a comeback in New York State after some 40 years of "exile" in the West.

Because of seed-borne disease problems, New York had been forced to rely on seeds produced elsewhere down through the years. But the State has maintained its position as the nation's top producer of red kidney beans.

The return of seed production was made possible by introduction of a new disease-resistant variety, Redkote, developed by Cornell University scientists.

Certified Redkote seed supplies for 1969 are estimated at about 400,000 pounds, enough to cover five to six percent of the state's 60,000 to 70,000 acres devoted to this crop.

Recommending only certified seed for planting, plant disease specialists warn that a grower would be taking a great risk if he plants his own seed.

SPICE LEADERS

Heading up New York's SPICE (State Poultry Industry Coordinated Effort) for 1969 are these Empire Staters:

President . . . Ralph Webster, Auburn; vice-presidents . . . (1st) Richard Cunningham, Ithaca, and (2nd) Albert Cohen, Woodridge; secretary & treasurer . . . Mark Backus, Syracuse.

Chairmen of various divisions are:

Producer . . . Milton Stimpson, Dresden; **Marketing** . . . Harold Ehrenfreund; **Hatchery** . . . Richard Cunningham; **Promotion & Merchandising** . . . Charles Collins, Ithaca; **Credit** . . . Irving VanArsdale, Auburn; **Feed** . . . Ben Bowman, Syracuse; **Associated Industries** . . . George Arno, Frenchtown, New Jersey.

CAGE REARING

The advent of rearing layers in cages . . . right from chick to hen . . . is of fairly recent beginnings. But the poultry industry moves fast, and adjustment is the order of the day!

Regional poultry specialist Stewart Ackerman, headquartered at 249 Highland Avenue in Rochester, New York, reports these cage-pullet farms in the nine Empire State counties he covers:

Wegman Farms, Wolcott
George Lupold, Palmyra
Phillip Havert, Newark
Harry Klotzbach, Basom
James Christianson, E. Pembroke
Mark Adams, Naples
Arthur Hawkins, Naples
Arthur Runner, Gorham
Fritz Aude, Geneva

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LEAGUE BUILDS

Dairymen's League will build a modern "special products plant" at Vernon, New York. The new facility, which will initially be set up to make cottage cheese, cream cheese, and sour cream, will be equipped to expand into new products now under development by the League's research department.

League president, Lester Martin, reports that there will be no reduction in the co-op's stress on marketing fluid milk, the product that provides the best per-quart return to dairy farmers. The two key purposes of the plant will be: (1) to save costs for League members while putting manufacturing milk into products that will give the Association the best possible return, and (2) setting up a modern, automated plant that will make it possible for the League to meet market needs for new and better dairy products.

The co-op leader points out that the Dairymen's League is a charter member of the newly-created research organization, DAIRY DEVELOPMENT, INC. With the new Vernon facility due for completion in 1969, the League will be in a position to take maximum and immediate advantage of commercially-practical findings of DDI.

RURAL PLANNING

Mr. R. H. Denman has prepared a pamphlet on rural planning and house numbering which will be of great use to planners in rural towns and countries, and to teachers and students in technical schools. It gives an interesting history of various systems tried . . . clock system, compass system, etc. . . . and points out that the numbering system fills a dual role. It gives a trail to follow and identifies individual houses. Anyone who has tried to find a house in a country or urban area, especially at night, will agree that some system is badly needed.

For further information, write Mr. Denham at 101 Brookfield Road, Ithaca, New York 14850. Copies of the pamphlet are available for $1.00 per copy.

FRUIT

Wine—Keystone State leaders continue to move toward the development of a winemaking industry in Pennsylvania. Late last year, the First Pennsylvania Wine Industry Conference was held . . . and research projects were planned that would further explore potentials and problems.

The interest has been stimulated by the Limited Winery Act . . . an amendment to the State's Liquor Code . . . stipulating that up to 50,000 gallons of table wine may be produced and sold at a winery premises, provided the grapes used are produced in Pennsylvania.

No Flavor Change — Scientists at the Eastern Utilization Research and Development Division of the USDA have found that exposing cider to ultraviolet light, without additives, preserves not only the cider but the fresh flavor. The cider stays sweet for 4 or 5 weeks under refrigeration.

Retirement Income — More and more people approaching retirement consider fruit-growing to supplement their retirement income, for pleasure, or for an expanded hobby. At present, raspberries seem the most promising retirement venture. The plants are not expensive, labor requirements except for harvesting are relatively small, and pest control is easier than for tree fruits. Also, because there has been a severe decline in commercial production of this fruit, raspberries bring good prices.

Trellis Hedgerows — The apple orchards of the future may resemble present-day grape vineyards, according to scientists at The Pennsylvania State University. Grown as trellis-hedgerows, the plantings provide a large number of plants per acre in rows 10 to 15 feet apart. The trees will be trained to form a thin hedge down the rows, about 6 feet in height and 2 to 3 wide. To keep the trees small, size-controlling rootstocks and growth regulators will be used.

Growers should be able to reach high production per acre with trellis-hedgerows because they will be able to regulate fruiting more easily, says Dr. Loren D. Tukey. In addition, the orchard space can be utilized more fully for actually growing fruit. Per acre costs to establish are higher, but profitable yields may be available in 3 to 4 years, as compared to 8 to 10 years for good returns from conventional-size trees.

Mite Control — Arthur Burrell of Peru, New York, comments that he has used early oil sprays to control European red mites in his apple orchards for many years. For the two-spotted mite, he's used Kelthane and Tedion. Guthion gives some mite control, but insect-resistance to the insecticide seems to have built up somewhat in his orchards.

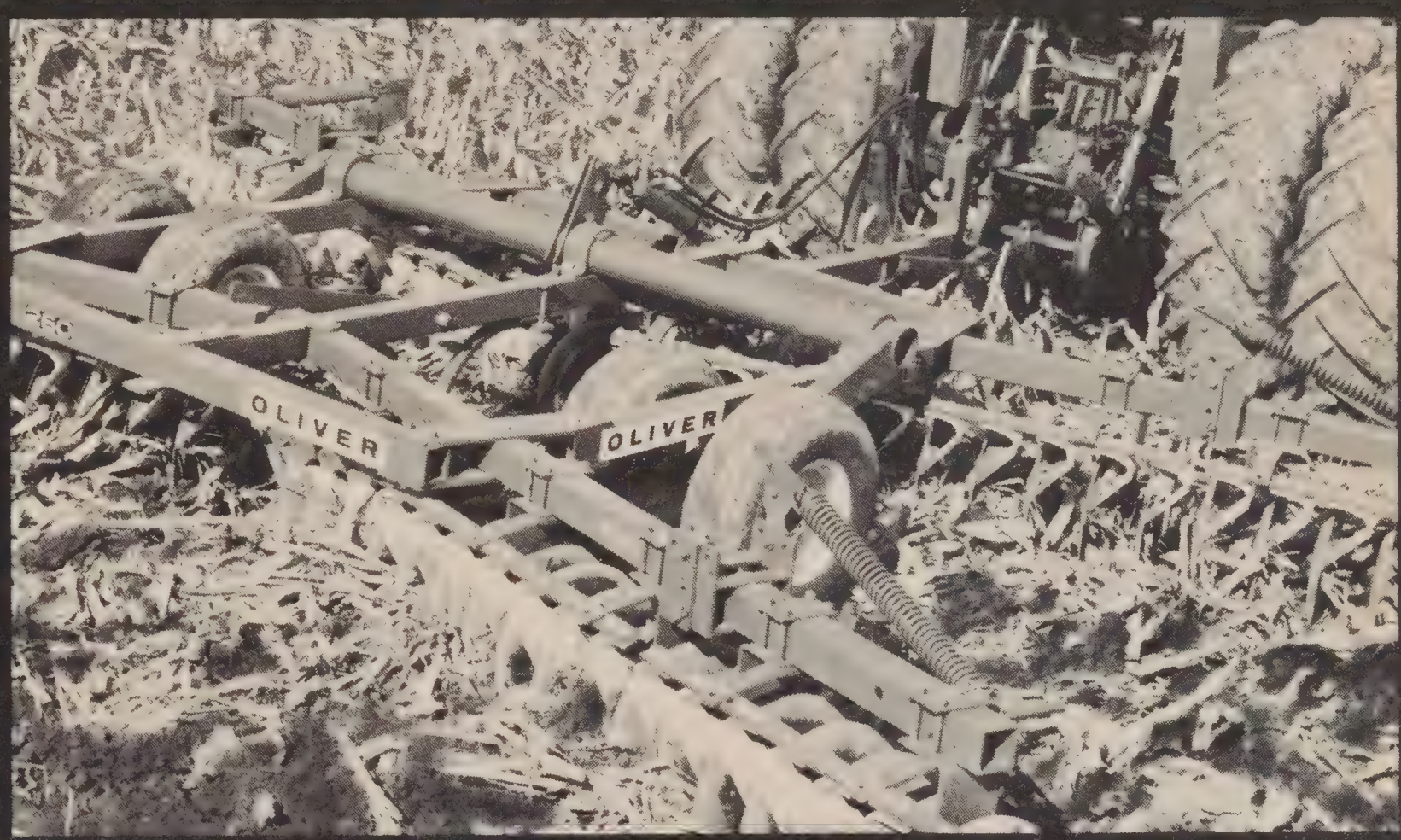
He applies oil at 3× to 4× concentrations, has been to 6× or even 8× with Kelthane sprays. It takes a careful operator to use concentrate sprays for mites . . . with attention to speed of the spray rig, and its position in reference to trees.

For late July or early August mite-sprays on full foliage he puts on a dilute equivalent of 600 gallons per acre (8× . . .75 gallons, 6× . . . 100 gallons, etc.) —GLC

Grape Harvest—According to Welch's last annual report, mechanical harvesters were in use in all areas supplying grapes to the Welch Grape Juice Co. . . . in the Chautauqua and Erie grape belt of New York and Pennsylvania, the Van Buren County area of Michigan, the Northwestern Arkansas area near Welch's plant at Springdale, Arkansas, and the Yakima Valley of Washington. More than 10,900 tons of grapes were harvested mechanically in these areas.

New receiving equipment was installed at the Welch plants for mechanically-harvested grapes. Considerable progress was made both in the improvement of the mechanical harvesting machines and in the receiving plant equipment, and company executives expressed optimism for the future expansion of mechanical harvesting.

Slice right through!



Rigid-frame 260 series disk harrow

Semi-flexible 250 series harrow with folding gang extensions.

Fully-mounted 352 disk harrow, widths to 11½ ft.

Heavy stalks or hard soil won't hold you up with this big Time Making Oliver Harrow.

It's the new rigid-frame 260 series with 275 lbs. of weight or more for every foot of width—86 to 118 lbs. per blade. Plus a gang angle which adjusts from 9° to 23°.

Sizes to 21 ft.; blade diameters to 22 inches. Sealed roller bearings, of course. Giant, square-tube gang frames have clean, trash-shedding design. Dual transport wheels for larger sizes.

For even heavier disking, check out the new 265 series with 150 lbs. of weight on each 24 or 26-inch blade. Sizes to 18 ft. 3 inches and a 3-ton working weight.

If rocks are a problem, you'll also find Time Making capacity in Oliver's 250 series with semi-flexible frame. Gangs can ride up over stones individually, avoiding blade breakage.

And there's a wide-choice of Oliver mounted harrows with the same kind of deep-cutting gangs. See your Oliver dealer. He can help you cut your disking time 'way down. Oliver Corporation, Chicago, Illinois 60606. Subsidiary of White Motor Corporation.

OLIVER
THE TIME MAKER

"IT'S FROM UNCLE ED IN FLORIDA, HE WISHES HE COULD AFFORD TO COME NORTH TO SKI THIS WINTER!"

Better Milk Production More Beef with Higher Quality Silage

FUNK'S G HYBRID

Funk's-G Silage Wins First Place Two Years in a Row in Penna. Forage Progress Days

IT TAKES much more than stalk and leaf tonnage for corn silage that will increase milk production . . . or put on extra pounds of beef in the feedlot. With Funk's-G varieties you get the ear corn production that adds energy, and taste-appeal . . . not bulk alone.

That's one of the big reasons why Funk's-G varieties have won first place two years in a row at the Pennsylvania Forage Progress Days Silage Competition. Actual forage analysis was considered along with the other factors associated with good silage.

There's a Funk's-G Hybrid in every maturity range to give you silage that's high in total digestible nutrients . . . high in appetite appeal.

The 32-page 1969 Hoffman Catalog contains two pages of charts to help you select the variety that will meet your needs exactly. Write today for a free copy. If you prefer, you may obtain one from your Hoffman Seed Man.

Hoffman FARM SEEDS

A. H. HOFFMAN SEEDS, INC.

Located in the Heart of Lancaster County

LANDISVILLE, PENNSYLVANIA 17538

ALFALFA • CLOVER • FORAGE • HAY • PASTURE • FUNK'S G-HYBRIDS

SPRAY IT ON...OR PAINT IT ON

YOU CAN'T BEAT

Dr. Naylor's **BLU-KOTE**

for COW POX* • RINGWORM • TEAT SORES • GALL SORES

Dozens of uses for all farm animals... Blu-Kote is an antiseptic, protective wound dressing that combats both pus-producing bacteria and common fungus infections. Covers the wound with quick-drying, penetrating coating, dries up secretions, controls secondary infection.*

Easy to use—just paint it on or spray it on! Blu-Kote provides lasting antiseptic contact, promotes clean, rapid healing. Try it soon...

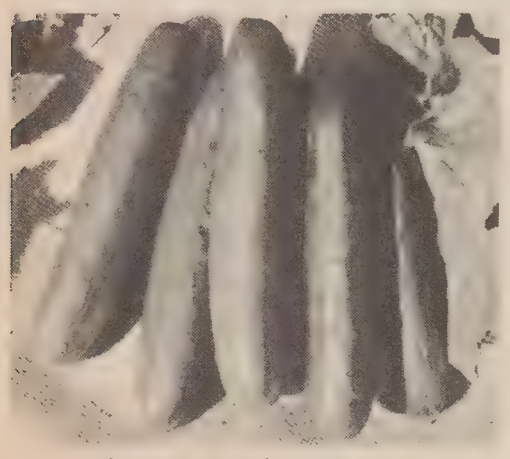
NEW SPRAY CAN

Top first aid treatment for minor surface wounds, hard-to-reach sores. Favorite container with hog, sheep and cattle ranchers . . . convenient to carry in saddle or car . . . easy to spot treated animals after application. 6 oz. spray can . . . $1.29 at dealers or mailed postpaid.

DAUBER BOTTLE

Dauber works best for treating Cow Pox sores you can reach with it. Application for Ringworm around eyes and face of dairy animals is better controlled with dauber. 4 oz. dauber bottle . . . $1.00 at dealers or mailed postpaid.

H. W. NAYLOR CO. • MORRIS 9, N.Y.



GEMINI Hybrid Cucumber

HARRIS SEEDS

For Yields You Can Really Brag About

You'll hardly believe the way Gemini can produce for you—from early till the end of the season. An "all-female" hybrid, its yields of fine, slim, dark green fruit are amazing.

SEND FOR **FREE 1969 CATALOG**

84 pages of illustrations and straight-forward descriptions of the finest vegetables and flowers.

JOSEPH HARRIS CO., INC.

16 Moreton Farm Rochester, N.Y. 14624

This is the "Bovine Bowl," an experimental round dairy barn at Rutgers University, New Brunswick, New Jersey.

BOVINE BOWL

The dairy barn has come full circle . . . from the round barns of 100 years ago, through the rectangular shape, and back to a full circle! Mark Singley, agricultural engineer of Rutgers University, has designed an experimental round barn that was recently built at the University.

The building, 63 feet in diameter, features a radial folded plate roof design, with an 18×-60-foot self-feeder silo in the center. The 4-inch thick sandwich roof panels feature urethane insulation placed in a honeycomb section for structural strength. The panels are 22 feet long and covered with exterior plywood. The roofing material is white reflective Tedlar with an asbestos backing. The insulated curtain wall panels are covered with sandalwood Fiberglas.

Circle Stabling

The animal stalls are arranged in a circle around the outer edge of the building. The floor between the stalls and the feeding platform next to the silo is slotted. Tapered reinforced concrete slats 5 inches wide spaced on 6½-inch centers form the floor. Animal waste is worked through the floor by the animals' hooves, and drops into a circular trench connected to a liquid manure storage tank adjacent to the building. An electrically-operated liquid manure pump is used to empty the tank approximately every three months.

Ventilation

Fresh air is drawn into the building at the roof line by exhaust ventilating fans. The air is collected in the trench below the slotted floor and exhausted through the roof of the liquid manure tank.

The base of the silo forms the manger where the animals feed themselves. Supplements are added to the feed as it is elevated into the silo by an electrically-powered silage blower. The additional grain required by the individual cows is fed in a separate milking area.

LIQUID FEED

IN 1968, a new liquid dairy feed supplement was introduced into the Northeast. The first carload of Allied Chemical's Compensator 50 to arrive in the Empire State was destined to go to Beach Stover's Cliffside Farms near Trumansburg, New York.

The supplement contains protein-equivalent in the form of urea, and phosphorous in the form of ammonium polyphosphate. With vitamins, trace minerals, and additives included, molasses serves as the carrier. The company plans to market Compensator 50 to farmers for their own mixing, as well as to local mills.

More Urea

The supplement was formulated primarily to enable dairymen to use urea more extensively in their feeding programs. Allied

(Continued on next page)

Beach Stover unloads Compensator from this tank car into a delivery truck.

DHIC CHANGES

In New York, the official title is DHIC (Dairy Herd Improvement Cooperative), and in most other states it's the DHIA (Dairy Herd Improvement Association) . . . but all the northeastern states are involved in similar searches for constructive change in dairy herd testing.

The NYDHIC, for instance, is actively exploring the setting up of nine DHI management regions to replace the present federation of 49 county cooperatives. The county associations will continue, and each will send to the appropriate regional DHI Advisory Council one delegate per 100 members. A five-county pilot setup in Western New York, headquartered at Batavia, has blazed the trail for such a move.

Advantages

One of the advantages of consolidation is the same as enlarging the size of farm business . . . possibilities for the greater efficiency of both equipment and people. A Foss Milk-O-Tester, for instance, costs around $16,000 . . . and can be justified only by a large volume of work to be done. However, it beats the old Babcock test all hollow in terms of samples tested per man-hour. A regional laboratory can use one economically; a county association could not.

It is contemplated that there would be five central milk testing laboratories to serve the entire state of New York. Coming soon is the use of disposable milk transport containers, paving the way for the use of commercial transport to bring milk samples to central laboratories.

Other states of the Northeast are also discussing regionalization of their DHI organizations. At the present time, nine states besides New York (all of New England, New Jersey, Delaware, and West Virginia) have their DHI data processed at the NYDHIC computers.

Under the reorganization plan in New York, all DHI supervisors would be directly employed by the NYDHIC, and would be under the direct supervision of the regional DHI managers.

DAIRYMEN ASK FOR MOR

The New York Dairy Herd Improvement Cooperative is making available to dairymen throughout the Northeast a Milk Only Records (MOR) program. It provides all the information now available in the standard DHIA and Owner Sampler (OS) programs . . . except the Butterfat data. The program became available in January, 1969.

MOR is similar to OS in that both are unofficial records. MOR fees will be determined by each county board of directors; Cayuga County (N.Y.) reports costs ranging from $13.30 per month on a 40-cow herd up to $31 per month for 100 cows.

The butterfat test obtained at the milk plant will be reported, and this test used in calculating MOR grain recommendations and value of milk sold. However, no butterfat information will be obtained for individual cows, or for the herd average.

ADA-NDC MERGER?

The ADA (American Dairy Association) and the NDC (National Dairy Council) are exploring consolidation of the two groups. A joint ADA-NDC committee has been formed including two Empire Staters . . . James Donnan of Galway, and Robert Turner of Horseheads.

LIQUID FEED

(Continued from page 34)

officials indicate these advantages possessed by Compensator 50 over dry feeding of urea to dairy cows.

— more uniform blending of the urea than is normally possible in dry feeds.

— increased acceptability of the urea because of enhanced palatability offered by liquid molasses.

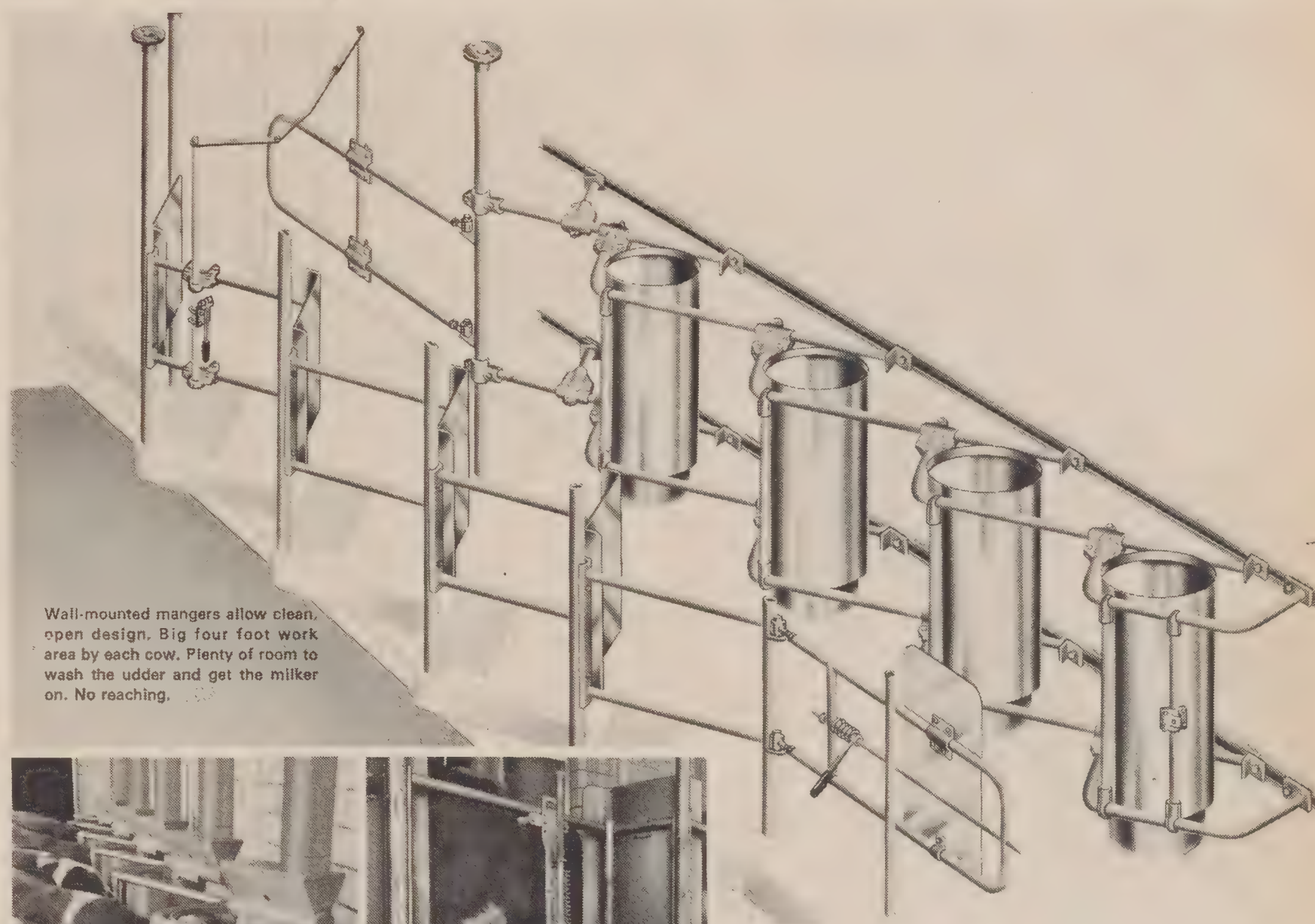
— greater total feed utilization because molasses provides energy that helps rumen bacteria to efficiently convert urea to protein.

At present, there are three liquid feed supplements being produced by Allied . . . Compensator-50 for dairy cattle, Compensator-50D-2 that includes diethylstilbestrol for fattening beef cattle, and Compensator-32R for beef cattle on range.

Urea has long been a more economical source of protein than have vegetable materials (soybean oil meal, for instance). Allied researchers believe that their liquid product completely overcomes urea's two major drawbacks of the past . . . low palatability, and the possibility of inadequate mixing of urea throughout the ration.

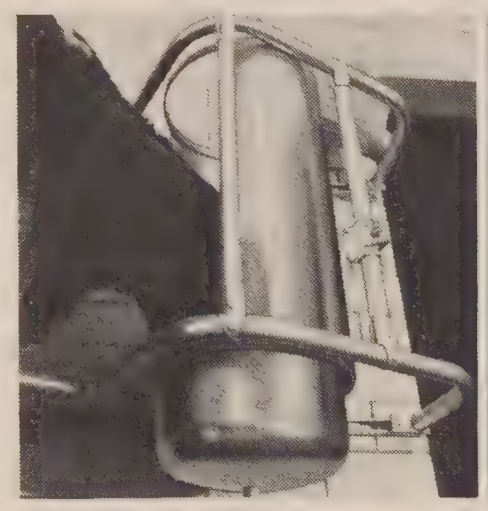
The company is a "basic" manufacturer of both nitrogen (used in urea) and phosphorous (used in ammonium polyphosphate). The latter is a form of phosphorous supplementation that carries no accompanying calcium.

NEW SURGE SAWTOOTH Herringbone STALLS

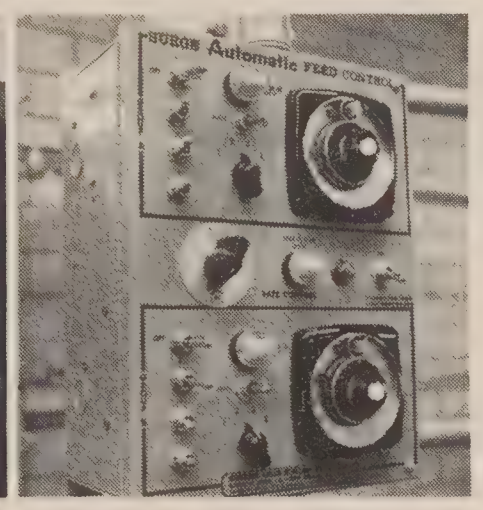


Wall-mounted mangers allow clean, open design. Big four foot work area by each cow. Plenty of room to wash the udder and get the milker on. No reaching.

Handle cows in groups. Note how the design positions cows positively. Big stainless steel rear shields . . . gently curved at each end . . . reaches well above the pinbones . . . no sharp corners to injure the cow.



Big, heavy-duty, stainless steel manger. Cows can't waste feed. Rounded bottom . . . no corners for feed to lodge. Cleans easily with a hose. Stainless, won't rust. Wrap-around feed shield screens cows, tends to quiet them.



Here's a new optional feature. A Group Feed Control Panel. It's all automatic. Push a button. Deliver a predetermined amount of feed at a predetermined rate in each manger. Want to feed heavy producers a little extra? Just flip a switch.

...better from every angle

Stainless steel . . . clean, streamlined design . . . automation. These are the elements that make the new SURGE Sawtooth Stalls better for Herringbone Parlors. Gives you a lot of advantages . . . like push-button, automatic feeding . . . stainless steel rear shields, gate shields and mangers . . . high-carbon, steel tubing with acrylic-epoxy enamel or dichromated electrogalvanized finish. For more details see your SURGE dealer.

SURGE

BABSON BROS. CO., OAK BROOK, ILLINOIS
BABSON BROS. CO. (Canada) LTD., MISSISSAUGA, ONT.

Here's where "non-skid" pays off...

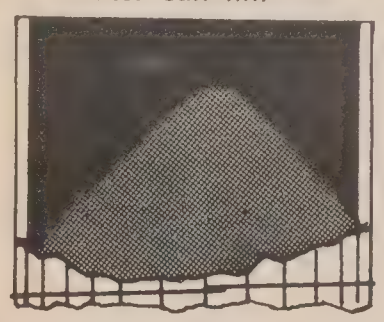
it's those extra pounds of milk at weighing time!

More dairymen are spreading our Barn Calcite — most everybody calls it "non-skid" — on their barn floors and runways because it *really* takes hold . . . keeps their cows on firm footing even in wet weather . . . helps them produce all the milk that's bred into them. Lime Crest Barn Calcite also keeps floors white and clean looking so much longer . . . it's economical, easy to use, and makes better fertilizer, too.

Your feed or farm supply dealer is the man to call. If he's out of "non-skid" right now, send us his name... we'll make every effort to see that he's supplied.

LIME CREST
BARN CALCITE
LIMESTONE PRODUCTS CORPORATION OF AMERICA, NEWTON, NEW JERSEY

The **Top-Fil** fills this part of the silo, the area no other distributor can fill.



With **Top-Fil** you can fill **more tons** of silage in your silo with **less labor.**

The **NEW** combination of Plate and Spinning Table, driven by individual motors, produces the filling action that enables **Top-Fil** to fill the silo perfectly from **BOTTOM** to **TOP.**

- Eliminate the chore of topping-out.
- Stay out of the silo, avoid gases and dust.
- **Top-Fil** is controlled from outside at ground level by it's control box. Dial the speed you need to fill the silo.

Write or call for further information. A2

Name _____

Address _____

City _____ State _____ Zip ____

EVEN - FLO Silage Distributor Inc.

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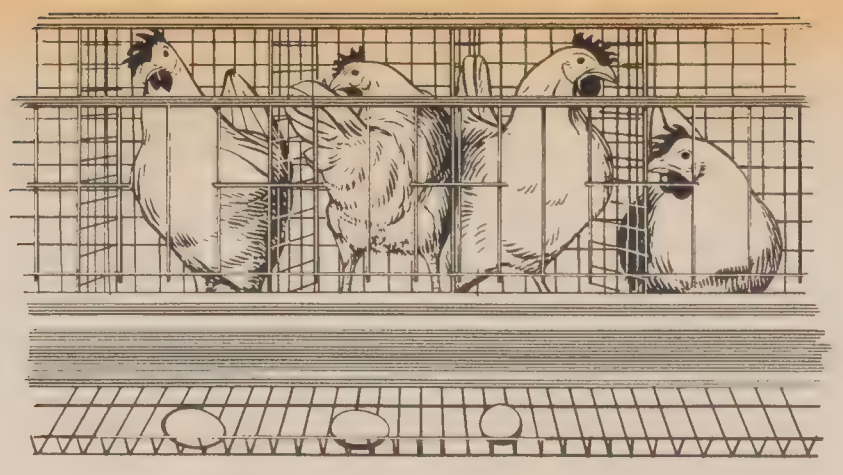


SPECIAL MARKETS

Ronald White of New Woodstock (Madison County), New York, has an uncommon sight in each of his two caged-layer houses . . . a rooster! No nostalgia on Ronald's part, though, but rather a concession to his children when it was discovered that the chick sexer had erred a bit and included a couple of roosters with the pullets.

There are 10,000 birds in one house, and 8,000 in the other. The latter was designed for 6,000 birds, but capacity was increased by one-third with the addition of perches in each cage (12×20 inches), so that there are five birds per cage. The other house, with the same size cages, still has four birds per cage.

Ronald reports that adding the fifth bird increased egg production per square foot of housing, but has decreased production per hen. He hasn't decided yet whether to go all the way with perches . . . doesn't like the fact that perched birds are much dirtier than in cages without perches.

Manure from the full stair-step cages drops into pits six inches deep . . . from which it is pushed by a garden tractor into a cross alley three feet wide and four feet deep. Next stop is on a tank-equipped truck used for spreading. Each building is cleaned every other week, and manure is spread on the 107 acres of land owned by the White Poultry Farm.

The larger house is equipped with thermostatically-controlled slot inlets that are powered open and shut by electric motors. Professor Clesson Turner of Cornell University used this house in developing and trying out his relatively new system of positive slot inlet control.

The Whites buy started pullets, replacing the birds in one row of cages every two months . . . there are four rows in the larger building, and three in the smaller. This means there are different ages of birds in the same building . . . playing with disease dynamite, according to many of the poultry experts. For the past four years, the Whites haven't had any disastrous disease break, though.

The reason for piecemeal layer replacement, rather than the "all-in, all-out" system more commonly used, is one of the constant need for all egg sizes in egg marketing. The Whites provide eggs packed in retail cartons for 18 nearby stores, as well as supplying eggs for hotels and restaurants in the area.

The closer a farmer can go toward the ultimate consumer in his marketing, the less variability he has in prices. During the "awful months" in 1967-68 when wholesale egg prices were disastrously low, the Whites didn't have to accept anything below 42 cents per dozen. Remember, though, that the Whites provided grading, thorough quality control, and delivery when the customer wanted eggs.

Some stores want to set their own egg prices . . . others ask Ronald to mark the prices on cartons before delivery, and then the store gets a fixed markup. Some eggs are packed in "White Poultry Farm" cartons, others in private-label cartons to suit the store. At one time, Whites had home delivery routes, but no longer.

Quality control is very important, Ronald believes, and he has turned down new business in order to avoid having to buy outside eggs. Recent trends have been toward very large egg-producing outfits, but the experts agree that a poultryman with special market outlets can do very well with a business not as large. The Whites are a good example. — *G.L.C.*

BROILER CAGES

Panelists at the seventh annual Broiler Housing Seminar have predicted that raising broilers in cages will be common practice within the next three to ten years.

Before cage broilers can become a reality, though, a variety of problems must be conquered. Among these are development of a suitable cage system, elimination of perosis and other leg and bone weaknesses, elimination of breast blisters and slab-sidedness, and development of a cage-bred broiler.

Jewell Graves, research specialist for the Big Dutchman Company, Zeeland, Michigan, predicts that plastic cages will be used not only in growing broilers but also in transporting mature birds to the processing plant. After this they would be cleaned, disinfected and returned to the farm for another lot of chicks.

"I would estimate that four times as many broilers could be grown in a given floor space with this system," says Graves, "and that an extra lot of chicks could be grown each year on farms using these cages. This system would also eliminate catching crews."

FEED COSTS

Penn State's bulletin 745, entitled "The Economic Feasibility of On-the-Farm Milling," compares the costs of commercial formula feed, on-the-farm milling, mobile milling, and custom milling.

Of the 66 poultry farms from which information was gathered, 40 bought commercial formula feed rather than formulating their own mix. The feed company's truck delivered the feed in bulk on a regular schedule.

Mobile milling (9 farms) involved a commercial mobile mill that traveled from farm to farm, stopping on a specified day designated by the poultryman.

Custom milling (8 farms) is a service provided by a commercial feed mill wherein feed ingredients are ground and mixed according to the specifications of an individual producer. Home-grown grains are stored at the mill's "grain bank," and processed feed is returned to the farm by a mill truck.

On-the-farm milling was done by five different methods:

—stationary belt-driven hammermill without a mixer

—portable PTO grinder-mixer

—portable PTO grinder and hand mixing

—portable PTO grinder with stationary mixer (most common method)

—stationary electric mill

When 104 tons of feed were processed, mobile milling was the least-cost method; at 182 tons, on-the-farm milling had a cost advantage. For all volumes, custom milling was the most costly way of handling home-grown grains. The processing cost per ton declined as volume increased for all three methods of using grains produced on the farm.

Interestingly, feed sample analysis showed no significant difference between the actual and expected protein level of rations procured by any of the four sources.

The bulletin's conclusions listed a number of considerations to weigh in addition to cost, such as technical assistance from feed companies, as well as availability of feed ingredients, capital or credit, and labor.

As with so many facets of management, on-the-farm milling may be a good deal . . . if! The manager's job is to weigh the "ifs," and arrive at a profitable decision.

CALCIUM & CHICKENS

Cornell University scientists report that high calcium diets are dangerous for growing chickens, causing high mortality.

Compared with laying hens, growing birds require only about one-third as much calcium; higher levels than this may kill up to 10 percent of the birds before they begin to lay. High calcium levels in young chickens suppress the normal activity of the parathyroid gland, a key organ that regulates the movement of the calcium in the body.

Researcher Simon Shane reported that young birds between the ages of eight and 20 weeks require only about 0.8 to 1 percent of calcium in the presence of 0.4 percent phosphorous in the diet. If the calcium content of the diet is increased, the phosphorous should also be increased, he said.

Adequate

During the early stage of egg production, it is desirable to keep the parathyroid gland active by having calcium levels in the diet adequate (2.75 to 3 percent), but not excessive.

Later in the production cycle, when egg shell quality begins to deteriorate, dietary calcium can be increased to maintain shell quality.

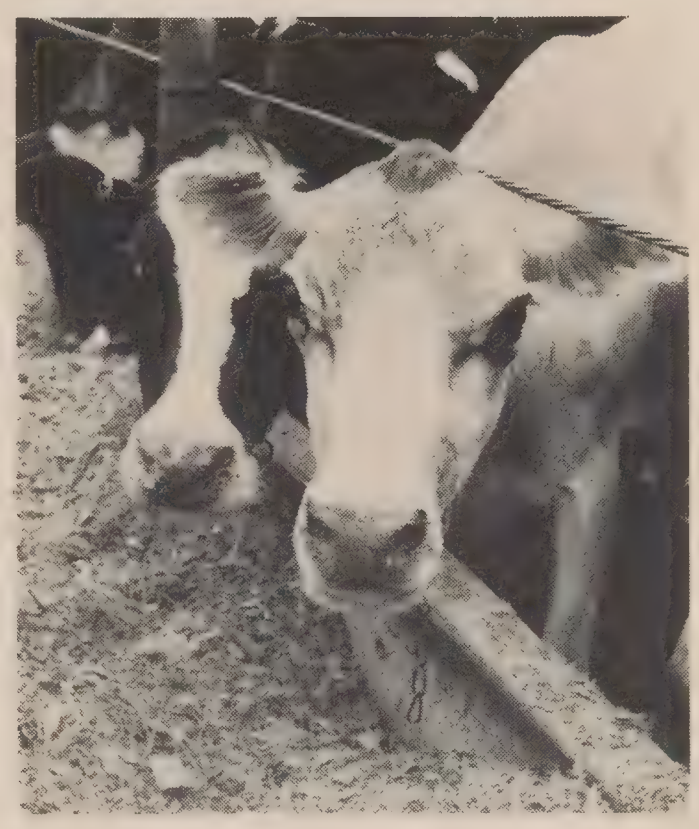
An average egg shell contains about two grams of calcium, and daily calcium intake during peak phases of the laying period should be increased to 3.5 grams per hen per day, or even higher, to insure adequate bone density and shell quality, Shane said.

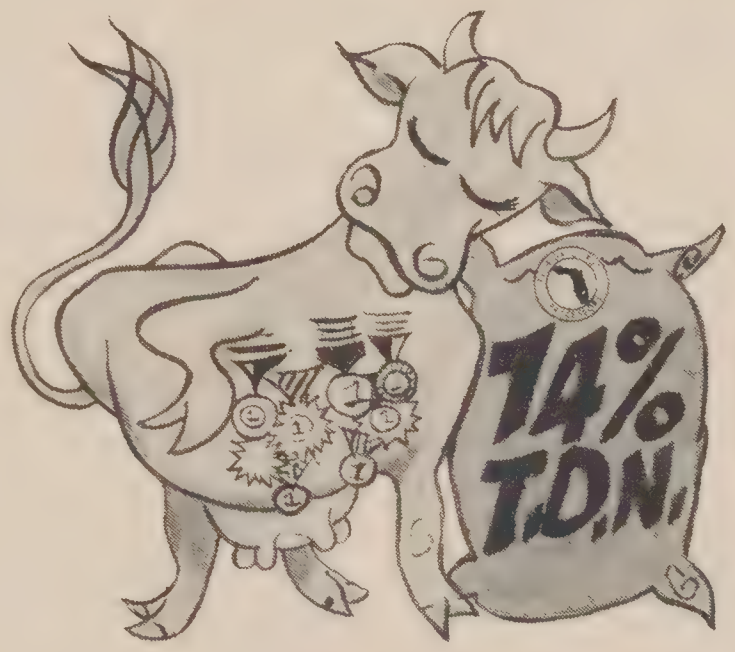
A hen weighing 3.5 pounds requires at least three grams of calcium a day to maintain steady egg production. The daily need for calcium for a human weighing 150 pounds is only about one gram.

"HE CERTAINLY CLEARS UP HIS CHORES FAST, CONSIDERING HE DOES THEM DURING COMMERCIALS!"

4 REASONS FOR FEEDING FLORIDA CITRUS PULP

- HIGH YIELD
- NUTRITIOUS CONTENT
- HIGH ENERGY VALUE
- SWEET TASTE





Florida Citrus Pulp is a high energy feed with a fresh, pleasant taste that cows just naturally like. It is a clean, easy to handle feed with a high (74%) percentage of T.D.N. (Total Digestible Nutrients). It is also one of the lower cost feeds when compared as to cost per 100 pounds of T.D.N. Before you plan your next feeding program consult your dealer about including Florida Citrus Pulp in your dairy or beef feed mixes . . . available in bag or bulk.

For more information on feeding or Total Digestible Nutrients, send for a FREE full color Citrus Pulp Brochure, or send for "Men Who Feed the World", a 16mm color film for group showing.

Content	% Protein	% Fat	% Minerals	% Fiber	% N.F.E.*	% T.D.N.**
Citrus Pulp	6.0	3.0	4.2	16.0	55.0	74.0
Beet Pulp	9.2	0.5	3.4	19.8	57.2	67.8
Snapped Corn	8.0	3.0	2.4	10.6	64.8	67.8

(* Nitrogen-free extract ** Total Digestible Nutrients)

THE BEST OF FEED FOR THE BEST OF BREED

FLORIDA CITRUS PROCESSORS

P. O. BOX 2134, DEPT. F.C.C. 21, DAYTONA BEACH, FLORIDA

No barn cleaner works faster than a Jamesway!

Fast manure

Jamesway's 23-ft. per minute speed gets all the solids and liquids into the spreader. You can't buy a faster operating barn cleaner! Big J chain barn cleaner gives you more value, too. Here's why:

Galvanized elevator! Single chute with galvanized beam resists natural manure acids, lasts years longer. Yet costs no more than painted units.

Forged link chain! Reversible, self-tightening chain turns on edge for easy oiling, longer life. Contoured alloy pins, long-wear shoes, easily-replaced bolted paddles.

Extra-heavy spur gear drive! Unitized drive provides non-slip, most efficient power transmission.

Rugged design! All the way through — to keep going longer with less maintenance.

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CHECK WITH YOUR POWER CHORING DEALER

Save BIG with Jamesway
"Cold weather specials"!
Get greater value than ever before.
Don't delay — offer is limited!

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SILO DISTRIBUTORS-UNLOADERS • CATTLE FEEDERS • BARN CLEANERS • BARN EQUIPMENT • FARM VENTILATION

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CANADIAN HEMLOCK
Sturdy, well rooted, 3-yr., 8"-14" plants. Ideal for background or hedge. Sun or shade. 25 for $6.00, 50 for $11.95, 100 for $21.95

25 EVERGREENS
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Food For The Spirit

by Robert Clingan

THE GENERATIONS NEED EACH OTHER

A great deal has been said about the "generation gap." One has only to listen to hear old people say, "You know how young people are now," or a young person say, "Why do adults hate teenagers?"

It is time we recognized how badly the generations need each other; every society needs age and youth, young and old.

Yes, every society needs what youth can bring it. It needs all the creative energy it can get. Somehow nature and God Himself created a surplus of energy and deposited it with the younger generation. A society without youth tires too easily, gives up too soon, and does not have the energy to tackle the problems it should, or face the challenges by which it might grow and become more creative.

A society also needs to periodically have its assumptions questioned. No group has the courage or the insight to question the "old ways" or why we do them, unless there are younger people to raise these questions. It is like Robert Frost's poem, "Mending Wall," when he and his neighbor had to rebuild a line fence when the livestock was gone, only because his grandfather had said, "Good fences make good neighbors." The young-minded and tough-minded Robert Frost said, "But only when there are cows."

An unquestioned and unexamined society will die in its tracks. A sign on an old Newland dirt road once read, "Choose your rut, you will be in it for the next six miles." These ruts are life-defeating. Youth asks why we must travel these narrow ruts, or take the paths to nowhere. The present youth generation has asked more questions and been more persistent in refusing to accept superficial answers than any generation that has gone before it. If our society becomes what it should, we will be greatly in debt to our restless, questioning youth.

Every society needs to be renewed and redeemed by the dreams and ideals that only youth will take seriously. A poet has described the dreams of peace, justice, brotherhood, and freedom, and called them "God's Dreams." Older people are cynical and too unimaginative to dream any more. They are too sure of what will not work and what few things will work.

It is equally true that every society also needs the wisdom that comes from experience, a wisdom about life that has been tested, and known only by those old enough to have lived it. A society could destroy itself and live in pursuit of false goals were it not for its older people, even the generation described in terms of age.

Every society needs the stabilizing influence of its older citizens. These are the people who say, "Just a minute . . . take a second look . . . think through before you dive off the deep end."

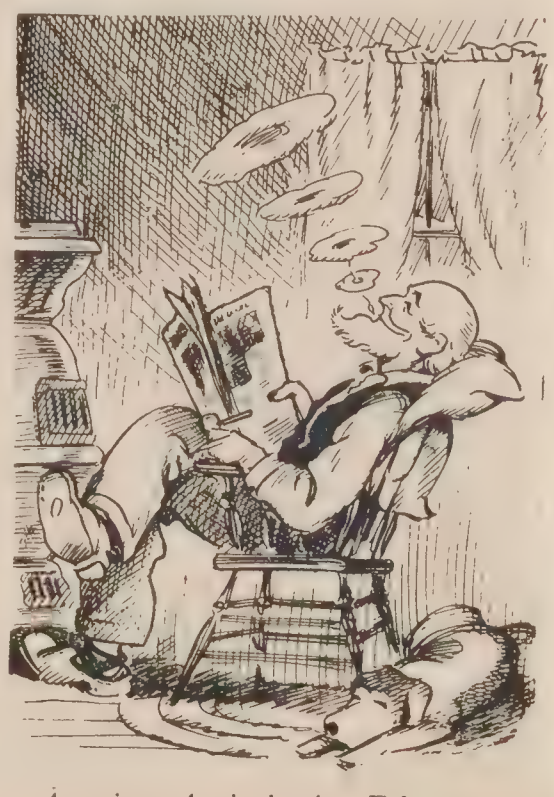
Both generations need each other. Neither group can contribute all it has to the other as long as it builds solid walls, or grows defensive, or becomes sharply critical of the other generation. A communication gap is understandable as a challenge, but a poor struggle between the generations is not a good thing. Youth against age and age against youth for no more reason than the distrust between the generations is a sad commentary on the life of a people.

We need each other to see all we ought to see, to know all we ought to know, to recognize all alternatives before us, and to move in the directions that will be fruitful, and appropriate to the times in which we live.

The Song of the Lazy Farmer

I'm fascinated by the pace at which mankind's exploring space. The way we're going we will soon have scheduled flights up to the moon; there'll be a weekly trip to Mars and maybe to more distant stars. We'll find out what makes Saturn's ring and what's on Jupiter, by jing; the braver souls will have to see just what it's like on Mercury. Young men with lots of time to spare may zoom clear out to Pluto where the temper'ture is mighty low; and someday they may even go a hundred jillion miles to see what's in some other galaxy.

I'd like to fly through space myself before I'm fin'ly on the shelf; but all I want's a short, fast run to some place closer to the sun where it is warm the year around and snow is never on the ground . . . some little place with tropic seas, with sandy beaches and palm trees, where lots of food grows naturally and no one has to work, by gee. Of course, Mirandy'd stay at home, through space she's never want to roam, so I'd have not a thing to do except relax 'neath skies of blue and dream up reasons why I'd slip the chance to catch each Earth-bound trip.



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Dollar Guide

For The Northeast Farmer

MILK PRICES under federal orders will be maintained during the 1969-70 marketing year. Manufacturing milk price support might have been changed April 1 ... and Class I price level could have been lowered April 30. In effect, the USDA action will make prices set by the orders permanent instead of temporary, officials say.

Connecticut blend milk prices in 1969 are estimated by Professor Stewart Johnson to average 16 cents per cwt. over 1968 ... above 1968's figures for January-September, and below comparable 1968 figures in October-December.

FEDERAL FARM PROGRAMS will see no big changes in 1969. However, it's quite likely that limit on government payments to individual farms will be set by Congress. Price supports for manufactured dairy products will continue as at present. Class I prices will not drop!

Sign-up for feed grains and wheat runs from February 3 through March 21. Little change in program. Target is to reduce seeding of corn, milo, and barley by 37 million acres ... was reduced by 32.5 million acres in '68.

There may be move to split farm program into two sections ... one for 1 million farmers who gross over $10,000 a year; another for 2 million farmers with less than $10,000 gross income.

POULTRY SURVEY COMMITTEE, made up of college poultry specialists and egg industry leaders, predicts: turkey crop for 1969 up 5% above '68; egg prices for first quarter of '69 about 5 cents per dozen above same period in '68. However, prices in third quarter 3 to 4 cents under last year, and in last three months 5 to 6 cents lower.

Feed prices in '69 will average slightly higher than in '68. Net incomes to egg producers slightly below '68.

HAY harvested in '68 averaged poor in quality. Cows will eat less of it, and may drop in production. More good silage will help maintain production, but more grain per cow is a good buy. Fortunately, ratio between grain price and milk price is especially favorable to dairymen.

1969 WINTER WHEAT CROP, forecast at 1.12 billion bushels, is 9% below 1968 actual production but still 7% above average. Acreage seeded was 43 million acres, 13% below '67.

PLYWOOD staining and painting are discussed in a data sheet, "Plywood Finishing for Farm Buildings," published by the American Plywood Association. Single copies of the sheet, No. 67-120, are available free from the Association by writing to them at 1119 A Street, Tacoma, Washington 98401.

VALUE OF SOIL TESTS to guide needed amount of fertilizer and lime increases as margin between costs and receipts tends to narrow. Figures from Indiana indicate that one-third of the lime used on the land in that State in 1968 was needed to neutralize nitrogen added as fertilizer.

"RURAL WATER SUPPLY" is an excellent 66-page booklet prepared by the New York State Department of Health. Describes and diagrams all types of wells, tells what to do if well becomes contaminated, and discusses special water problems. Single copies free to residents of New York State. Write Department of Health, 84 Holland Avenue, Albany, New York 12208.

TWO-CYCLE ENGINES should never be used with detergent oil because oil and fuel are mixed together, and the oil additives are left behind as products of combustion.

HIRING a 14 or 15-year-old to operate a tractor? Unless it's your own child, you must legally require that he has completed a 10-hour course in tractor operation. Check with your agricultural or 4-H agent for details.

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FROST INSURANCE?

by Amos Kirby
New Jersey Editor

CAN helicopters save peach crops in late spring months when the buds are swelling and sap has started to flow? There is evidence that they can create enough air flow to ward off frosts and freezing temperatures to the point that buds can be saved from serious injury.

Two growers, one in South Jersey and one in Central Jersey, have used helicopters at critical stages on nights when temperatures were getting down to the danger point, and in both instances these growers had peaches when others had very few . . . not enough to call even a half crop.

In 1968, Casella Brothers, Swedesboro, hired a helicopter for four hours during the critical morning hours, and came through with a normal crop. Total cost was about $260 for the helicopter and operator.

Three Years Loss

In 1968, Delicious Orchards in Monmouth County, following a crop loss for three years, decided to do something. With the aid of the Weather Bureau Station at New Brunswick, elaborate testing was done in this block of trees near Colts Neck . . . the most elaborate and intensive tests ever undertaken in New Jersey.

In a report by Edwin S. Addison, III, advisory agricultural meteorologist at the New Brunswick Station, he states that while winter injury can be severe under low temperatures even during the rest period, losses can be eliminated, or at least greatly reduced.

Ernest Christ, fruit specialist at the College, who is probably the best-versed fruit man in New Jersey, cooperated with the program. "Erny" has been keeping tabs on the use of helicopters in apple orchards over the hills and mountains of Pennsylvania, and what he saw was good.

Critical Stage

What concerns most New Jersey peach growers is the period when the days start to warm up in February, the sap starts to flow, then bang, there are below-freezing temperatures. A swing of 60-degree day temperatures to 22 to 25 next morning can create a problem. New Jersey has on rare occasions even had daytime temperatures of 75 degrees for several days in a row . . . and that meant trouble if the rest period was over and the tree actually awake.

During the study period from March into May, it was discovered that there were nine nights when there were danger periods. They usually occurred on clear, calm nights when high-pressure areas from the west would move into Monmouth County, settle over New Jersey during the night, and then move off.

This survey was intended to determine air temperatures at the level in the orchards where the fruit buds were located. Temperatures were of greatest concern at the 4 and 18-foot levels, although they were recorded at 48 and 78-foot levels. The proof of the pudding was found in saving the crop, and it was possible by stirring the air sufficiently at the fruit bud zone to keep temperatures from dropping below the danger point.

Wind Machines

Fixed wind machines properly located can also be a frost preventer. One has been in use for many years at the New Jersey Silica Sand holly groves near Millville. According to Danny Fenton, manager of this big holly plantation, they have been able to save the berry crop in recent years by starting the powerful wind machine on nights when frost was a threat.

No one claims that helicopters and fixed wind machines can save crops in every instance, but they have proved that they can be insurance between a crop failure or a nearly-full crop.

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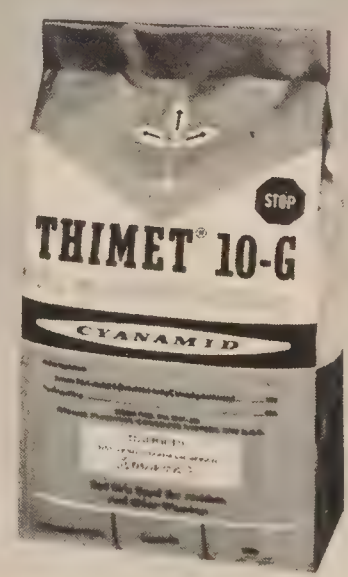

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BARGAINING PAYS

New Jersey fruit and vegetable growers are finding that bargaining pays . . . through better prices and the elimination of minor problems.

The asparagus growers have demonstrated that through bargaining conducted through the New Jersey Agricultural Marketing Association they have received higher prices. At the same

(Continued on next page)

time; through cooperation with processors there has resulted better understanding between seller and buyer.

In the last twenty years contract prices on asparagus have moved from about 8 cents per pound to 18 cents; tomatoes to processing plants have resulted in slightly-higher prices, although not always to the level that growers have desired; snap and lima bean growers have received better prices . . . and the same applies to other crops.

Side benefits include better working arrangements with processors, a real effort on both parts to work together to improve growth and delivery practices, better understanding of each other's problems, and an exchange of ideas that has been of benefit to all concerned.

No one can pinpoint the exact value of all of these minor changes. The major benefit beyond the increase in farm price has been a realization on both sides that there must be harmony and agreement on both price and non-price factors.

GRIND GRAIN

Should I grind my homegrown grain for livestock, or feed it whole?

It all depends. If the animal chews the grain, no special need to have it ground; but do animals chew their grain much better than some humans?

Tests at Rutgers indicate that when whole corn is fed to dairy cattle, 25 to 30 percent of it will pass through undigested. Grinding crushing, or rolling will reduce that to 5 percent or less.

Not all chew as they should. Young calves, hogs, and other animals do a much better job than dairy cows. Could it be that these other animals have more time or better teeth? No comment!

Another advantage of grinding is that it helps in the mixing of other protein and mineral supplements into the grain mixture.

BY-BYE, BLACKBIRD!

Birth control for blackbirds appears to be the newest thing on the horizon for controlling this pest of orchards and corn fields. A new method of birth control, a sterilant, appears to be a safe method of bypassing every known barrier erected by men through legislation that has come down the road.

It involves no fire crackers, guns, poison baits, or exploders. The New Jersey Department of Agriculture comes up with a preliminary report that gayly-colored strings and strips of brightly-colored plastic treated with a chemical attract blackbirds furnishing their homes, much like an interior decorator makes a home more attractive with colors. Tests conducted show that blackbirds pick up these bits of plastic and weave them into their nests. The birds lay their eggs in the nests, and when they come in contact with the eggs, many fail to hatch.

What about desired birds? Think back, and if one has observed the materials used by different species, birds are usually very particular about what materials they use. Also, most of these birds do not nest in areas where blackbirds center their nest-building activities.

This has been merely an experiment. There are no recommendations available for wholesale usage, but it just might prove to be the breakthrough.

PELLETED FEEDS

Along with grinding, pelleted feeds appear to be another economy practice on most dairy farms. Feeding pelleted feeds may cost at least $2 per ton along with the cost of grinding, but both seem to go hand-in-hand in getting more out of each dollar of feed provided the milking herd.

Pelleted feed has its advantage in mechanical feeding in milking parlors; cows can eat pellets more rapidly than dry feed. Another advantage is that some high-energy, low-cost by-product feeds which normally are unpalatable can be incorporated into pellets with very good results. (Like a bit of catsup on baked beans adds flavor for the writer!)

While pelleted feeds may not increase milk production, they may be handled with greater ease, eaten at a more rapid rate, and thus reduce the time in the milking parlor. This, too, can be an economy item too important to overlook.

"I think your father wants a word with you."

The information contained herein is general in nature and is drawn from sources deemed to be reliable. Any application to a particular farming operation requires the advice of qualified experts and is subject to limitations of good management, weather and other conditions present at the individual location.

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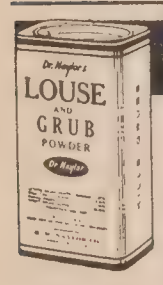

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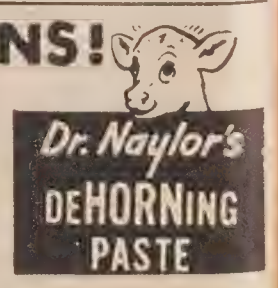

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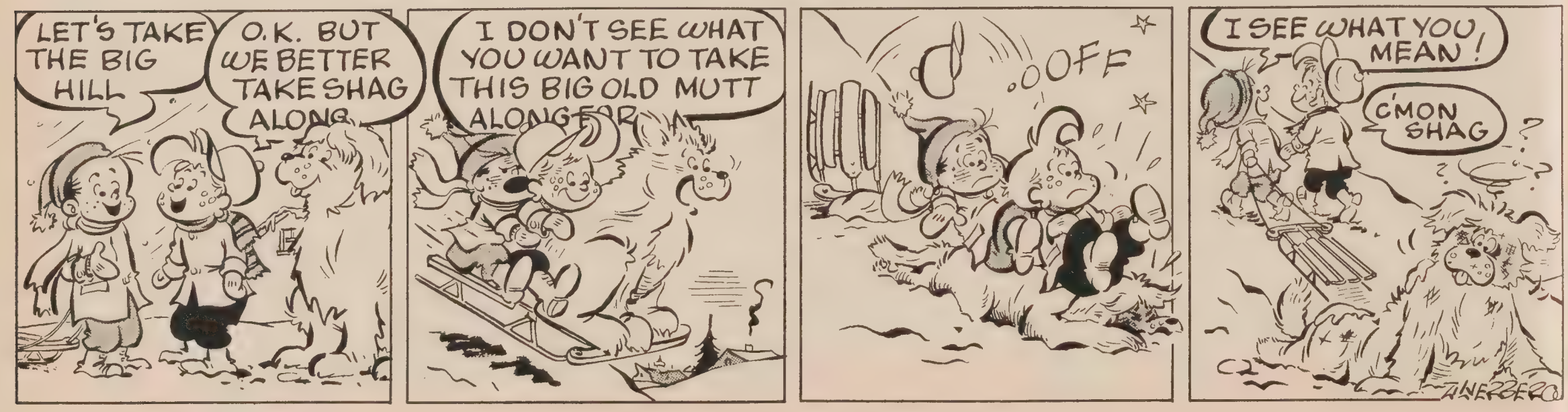

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Obviously, you don't want to go to this kind of extreme, but making sure your tootsies are covered properly will prevent an awful lot of sneezes and wheezes.

A truly apt description of winter weather is the word "blistery" for this can be true both figuratively and literally. Lips, knees, elbows often resemble creviced sand paper.

Nowadays, though, there is no earthly reason for you to go around looking like a shriveled cracker. There are some marvelous clear lip-aids on the market as well as inexpensive creams to keep your elbows and knees ship-shape. Just apply at night and in the morning you'll begin to look like your princess-self.

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Why don't you ask your mother or teacher or local knit shop how to make one? This is a great project for those sleety days when there's nothing to do and you'll probably be starting a brand new fad at school.

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Our current project is an autumn leaf rug which the children and I designed and drew, using the various leaves we find each autumn in Vermont. — **Mrs. M. H. Batchelder, Alburg Springs, Vt. 05440.**

A "Saver"

I always hate to throw away something that I think someone else might be able to use. Guess I'm what is known as a "saver." I keep used greeting cards, "Upper Room" and "Daily Word" booklets, Bible pictures, religious cards, and also church bulletins with a message. I take some to hospitals and homes and give them to anyone who can use them. — **Mrs. Edwin Murdock, Roseboom, New York 13450.**

GRANDMA

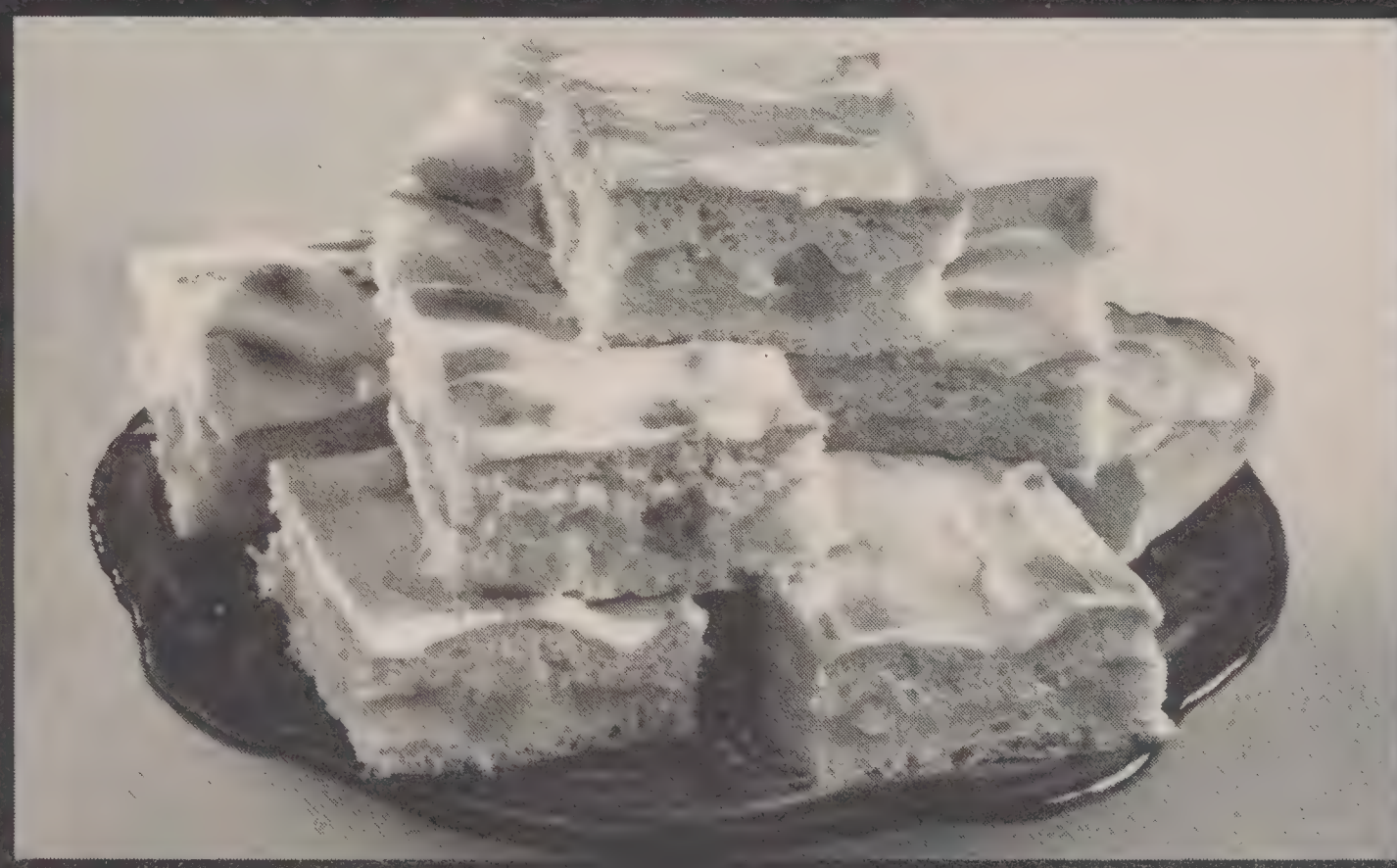
by Fern Berry

My grandma never sat and rocked,
And sighed, and talked of other days.
She bustled, and she brewed and baked,
And never quarreled with modern ways.

Her garden flourished, clean and straight,
The rows that marched along the hill;
Her apple trees were trimmed and sprayed;
When work was done, she'd say, "God's Will."

She was a bit of Ireland's heart,
Transplanted like a sturdy tree.
She sank her roots in this strange land,
And built her dreams for all to see.

A SIMPLE BREAKFAST THAT'S SIMPLY DELICIOUS.



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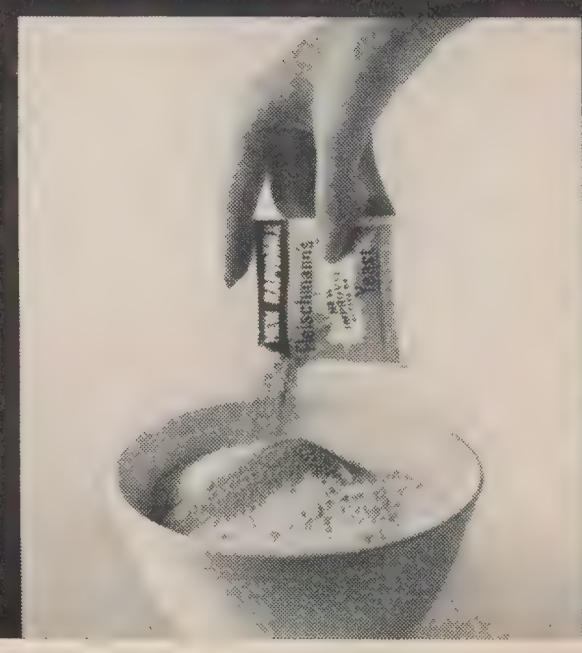

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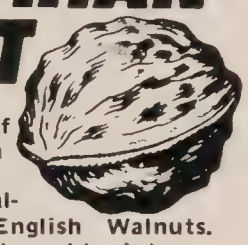

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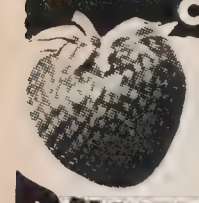

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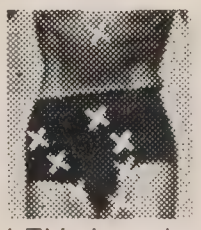

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Photo: General Mills

Invite a few guests for supper and serve spiced pancakes with hot cherry sauce. They'll make a real hit!

PANCAKES and WAFFLES

by Alberta Shackelton

A STACK OF fluffy golden pancakes or crisp tender waffles is always inviting, and especially so on cold, wintry days. The makings for these "quick breads" are always to be found in the kitchen and can be quickly turned into a main course or dessert. Pancakes have become a symbol of Shrove Tuesday, the day before the beginning of Lent, which falls on February 18 this year. In Holland and Germany the raised doughnut or "Fastnacht" is a similar symbol.

Pancake variations are endless. Serve them plain and sweet with sirup, honey, jam, brown or shaved maple sugar, or fruit sauce; hearty with bacon curls, sausages, frizzled ham, topped with or rolled around creamed vegetables, seafood or chicken; or add to the pancake batter crisp bacon bits, diced cooked ham, chopped nuts, drained whole kernel corn, dates or raisins, grated apple, grated orange and lemon peel, well drained fruit, or coconut. Also, try cornmeal, whole wheat, oatmeal and rice pancakes sometime.

Most of the variations suggested for pancakes may be used for waffles, or try putting chocolate bits or cocoa in sweetened waffle batter for chocolate waffles to be topped with ice cream and sauce.

A Creamed Chicken and Waffle Supper is one of my favorite ways of entertaining 4 to 6 guests. For extra crispness, I add coarsely cut pecans to the creamed chicken and serve Fruit Salad Deluxe (combination of fruits, tiny marshmallows and coconut, folded with whipped cream or dessert topping, and pass brownies to go with that last cup of steaming hot coffee.

Baking Pointers: Do not overmix either pancake or waffle batters. Stir just to moisten dry ingredients. Uniform size and thickness makes for even baking, so measure batter for each pancake and waffle; a scant quarter-cup batter makes about a 4-inch pancake or medium-sized waffle. Turn pancakes only once. If you do not have a heat-controlled appliance, test proper heat by dropping a few drops of water on griddle or waffle baker; water will dance if heat is correct. Keep baked pancakes and waffles warm by placing on rack in a low temperature oven.

BASIC BUTTERMILK PANCAKES

1½ cups all-purpose flour
3 tablespoons sugar
3½ teaspoons baking powder
1 teaspoon baking soda
¾ teaspoon salt
1 egg
3 tablespoons melted shortening or salad oil
1½ cups buttermilk, approximately

Sift together the dry ingredients. Combine egg, oil, and buttermilk (amount of latter depends upon the thickness of pancake desired) and stir just until blended. Bake on a lightly greased hot griddle or electric skillet. Turn lightly as soon as pancake is puffed and bubbly and brown other side.

Spiced Pancakes with Hot Cherry Sauce: Make plate sized pancakes, adding favorite spice to dry ingredients. Stack with butter and cherry sauce between and top with hot cherry sauce.

To make Hot Cherry Sauce, combine ¾ cup sugar, 3 tablespoons cornstarch, ¼ teaspoon cinnamon, dash salt, 1 cup chopped cherries (canned, frozen or fresh), 1 tablespoon lemon juice and 1 cup juice from cherries. Cook with stirring until thickened.

French Pancakes (Crepes) are

(Continued on page 49)

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HANDY KITCHEN ITEM

Shown here is a leftover piece of terry cloth, cut in a 16-inch circle and bound with bias tape that picks up a color in the terry cloth pattern. Attached in the center of the circle is a 24-inch piece of the tape, sewed together to resemble a cord. The terry cloth and tape were on hand, and it took about ten minutes to bind cloth and attach double tape in center of circle.

Shown in second illustration is the use to which this costless item is put. Hung on handle of refrigerator or cupboard door, it is always convenient for the many times the worker wishes to dry her hands while doing her kitchen tasks. Once you make and use one, you'll wonder how you ever got along without it!

— Louise Price Bell

Waffles . . . . .

(Continued from page 48)

made from a simple thin batter in a special crepe pan if available; otherwise, use a 6-inch shallow frying pan, greased with just enough butter to coat bottom of pan.

The popular Crepes Suzettes are baked, folded into quarters, or rolled and reheated in an orange sauce in chafing dish. They may also be filled with jelly or jam, stewed or fresh fruit, then sugared and topped with whipped cream. They are also delicious filled with meat, poultry, seafood, vegetable or mushroom mixtures, then rolled, covered with a sauce and broiled.

FRENCH PANCAKES

- 3 eggs
- 3 tablespoons melted butter
- 1 cup all-purpose flour
- 1 tablespoon sugar
- ¼ teaspoon baking powder
- ½ teaspoon salt
- 1¼ cups milk

Beat eggs just to blend yolks and whites. Stir in melted butter and then the combined dry ingredients. Add milk and stir until smooth. Grease lightly a small shallow skillet. Heat to medium heat and pour in just enough batter (1 to 2 tablespoons) to coat bottom of pan; tip skillet back and forth to coat thinly. Bake over medium heat until lightly browned on bottom; turn and bake on second side. Stir batter in bowl occasionally as you bake.

For dessert, spread each with a tart jelly or jam, roll up, and sprinkle with powdered sugar; or spread with sour cream or whipped cream cheese and a fruit preserve. In fresh strawberry time, fill with sliced strawberries, roll, and top with more berries and whipped cream.

CORNMEAL WAFFLES

- 1½ cups yellow cornmeal
- ¾ cup flour
- 3 tablespoons sugar
- 3 teaspoons baking powder
- 1 teaspoon salt
- 2 eggs, separated
- 1½ cups milk
- ½ cup melted shortening or salad oil

Sift together cornmeal and other dry ingredients. Combine egg yolks, milk, shortening or oil, and stir into the flour mixture just until blended. Fold in beaten egg whites. Place about ¼ cup batter or less in each section of waffle baker, spreading to cover surface if necessary. Bake until steaming stops. Makes about 5 large waffles.

Serve with frizzled Canadian bacon or thin ham slices, grilled sausages or bacon curls and fried apple rings, plus plenty of butter and sirup or strawberry jam.

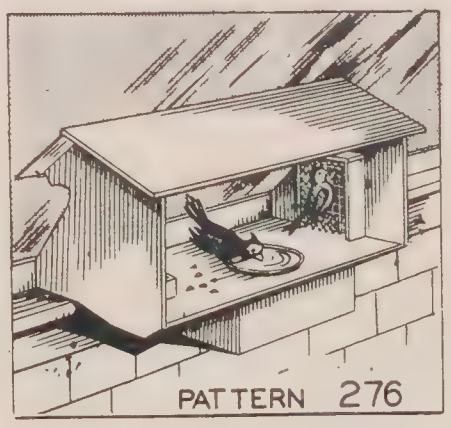
BASIC WAFFLES

- 2 cups all-purpose flour
- 3 tablespoons sugar
- 4 teaspoons baking powder
- 1 teaspoon salt
- 2 eggs
- 1½ cups milk, approximately
- ½ cup melted shortening or salad oil

Sift together the dry ingredients. Combine egg, milk, shortening or oil and stir into flour mixture, just until well blended. Pour onto hot waffle iron and bake until steaming stops. Makes about 12 waffle sections.

Serve with Seafood Newburg or Pecan Creamed Chicken. For Waffle Shortcake, sweetened pineapple, strawberries, peaches, raspberries, or other fruit may be served atop waffles and topped with whipped cream.

HOME WORKSHOP



Summer and winter birds will stay around your home if you give them food, shelter and water. Pattern 276 gives actual-size guides for a window-sill feeding station and directions for a non-freeze water pan. The same pattern is used for the open-face house that robins like. The pattern is 50 cents. It also is in the Birdhouse and Feeder Packet No. 31 which sells for $1.50.

Send order to **American Agriculturist, Pattern Dept. P.O. Box 50, Windsor, N.Y. 12550.**

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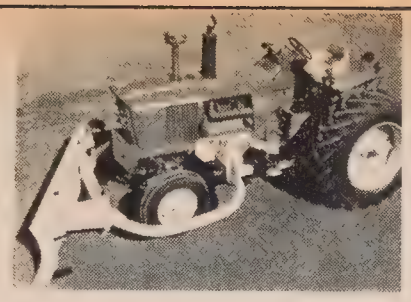

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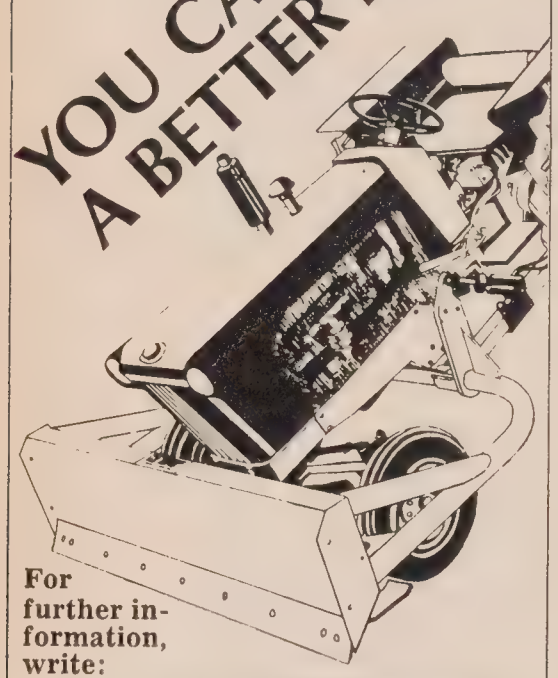

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Dwarf Snowball Bachelor Buttons

New Flowers For Your Garden

by Nenetzin R. White

THIS YEAR we have only one medal winner—Zinnia "Cherry Buttons," a silver medalist and a real charmer. It grows 10 to 12 inches tall and blooms profusely in a new cherry-coral-rose color. Fully double, its 1½ to 2-inch flowers are almost as deep as they are wide, and they stand on strong, wirey stems.

Zinnias do occupy a lot of space in our gardens, as they well should, for they seem to give us more show than any other flower, with the possible exception of petunias. There are two other Zenith zinnias on the All-America selection list for 1969. One is a giant rose, cactus-flowered hybrid, "Rosy Future," with a rich rose-pink color.

The other is a firey orange giant hybrid zinnia, "Torch." Both of these have mammoth flowers up to 6 inches across, with ruffled and quilled petals that reflect the sunlight. These mildew-resistant plants burst into bud and flower when they are only 15 inches high. Their eventual height is about two feet, and they are covered with blossoms on many side branches.

Another winner this year is dwarf, pure white double cornflower, "Snow Ball." These snow white, fully double flowers are a far cry from our old bachelor buttons. This one has a wonderful running mate from the 1937 winners' group—"Jubilee Gem," a great dwarf, double blue.

The last selection this year is Vinca Rosea procumbens "Polka Dot." White with a red eye, this one should be a pretty change, hanging down from our planters and creeping on banks and rockeries.

Another new flower and the first in a wonderful class of dwarf marigolds is Moonshot Yellow Marigold. The stocky plants grow only 14 inches tall, but the flowers are fully 3 inches across. Petals of the big double blossoms are slightly ruffled, and their clear, bright yellow color is delightful. Hybrid vigor keeps them loaded with blooms right up till frost.

Carefree Geraniums

Three geranium winners from last year (Carefree Scarlet, Deep Salmon, and Bright Pink) have taken the country by storm. They are disease free, need no pinching, and grow true from seed. Advance orders from wholesalers this year already surpass all 1968 sales. Better place your orders early, for it takes four to five months to bring these into blossom.

Many of us visit parks and gardens to see new and noteworthy plants for our own gardens. Visitors are welcome at all reasonable hours in the 28 trial gardens for All-America Flower Demonstrations. Here you can see the '67, '68, and '69 winners, as well as previewing some of the 1970 winners.

I am not going to give you the complete list, but here are a few of the test garden locations in our Northeastern area.

New York—Queens Botanical Garden at Flushing and Sterling Forest Gardens at Tuxedo, also trials are at Cambridge, Farmingdale on Long Island, and Rochester.

Connecticut—The University at Storrs and Federal Correctional Institute at Danbury.

Vermont—University of Vermont at Burlington.

Pennsylvania—Hershey Estates at Hershey and Longwood Gardens at Kennett Square, with trials also being conducted at Doylestown, King of Prussia, Smethport, and University Park.

All-America selections provide the only recognized ratings of new flower and vegetable varieties for North America. We can depend on these award varieties.

Photos: Joseph Harris Co

Polka Dot Vinca

Moonshot Yellow Marigold

The city of Cortina in the beautiful Italian Dolomites is an outstanding scenic attraction of our Grand European Holiday and Grand Alpine Tour.

GO TO EUROPE THIS YEAR!

It's a wonderful experience to go to Europe when you travel with American Agriculturist and Travel Service Bureau. Our tours cannot be beat for reasonable price (the "all-expense" ticket includes everything we can possibly include in it), and no other tour offers you as much. Our tour escort takes care of all travel details, so there's nothing for you to do but relax and enjoy your self. Make 1969 the year you will visit Europe!

If this is your first trip to Europe, probably you will want to see the most famous places in several different countries. With this in mind, we have planned our **Grand European Holiday** from September 11 to October 22, and our cruise across the Atlantic will be aboard the luxurious new Queen Elizabeth 2. It is also possible to fly one or both ways if you want to shorten the time away from home. Truly, this is the vacation of a lifetime!

If you have been to Europe one or more times, perhaps you would like the opportunity of going back to one favorite region to revisit well-loved spots and to see additional places not included on your first trip. The following four tours will let you do just that . . . become well acquainted with smaller areas so that you will come away feeling you know the country and the people. Space will permit us to mention only a few of the many places we will visit.

The dates for our **British Isles Holiday** are May 6-15. In England we will spend several days in London, enjoying all the attractions of that famous city. Also, we will see Windsor, Hampton Court Palace, Canterbury and Salisbury Cathedrals, historic Stonehenge, Shakespeare Country, and the beautiful Lake District.

In Scotland, we will visit Edinburgh and spend a day traveling through the heather-covered countryside to visit lovely Loch Lomond. Our itinerary in Ireland will include Dublin, Cork, Blarney Castle, Killarney, and County Kerry. Also, we will again take a side trip to Holland to see the famous tulip fields in bloom.

From June 3 to 24 we will visit the Land of the Midnight Sun on our **Scandinavian Holiday.** Sightseeing in Denmark will include Hans Christian Andersen Country and "Wonderful, Wonderful Copenhagen;" in Sweden-Stockholm, Dalecarlia and Uppsala. The mountains and fiords of Norway are beyond description, and we will also have an opportunity to take a trip north of the Arctic Circle to see the full disc of the sun at midnight. A final attraction is a day spent in Holland where we will visit the Peace Palace, Madurodam, and the giant flower auction market at Aalsmeer.

A different vacation offered for the first time this year is our **Grand Alpine Tour,** and the dates are July 31 to August 21. Included on this European vacation are Austria and Liechtenstein, the Tyrolean and Bavarian Alps, Salzburg, a steamer cruise on the Danube River, Vienna, the Italian Dolomites, St. Moritz, Lucerne, Berne, Interlaken, and Gornergrat summit with its magnificent view of the Matterhorn.

Another unusual tour is **A Journey Into Antiquity** from September 16 to October 7 which takes in all of historic Greece, the ancient Dalmatian Coast of Yugoslavia, and a delightful week-long cruise of the Greek Islands and Turkey. Be sure to ask for the folder describing this fabulous vacation.

Other Tours

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Gordon Conklin, Editor
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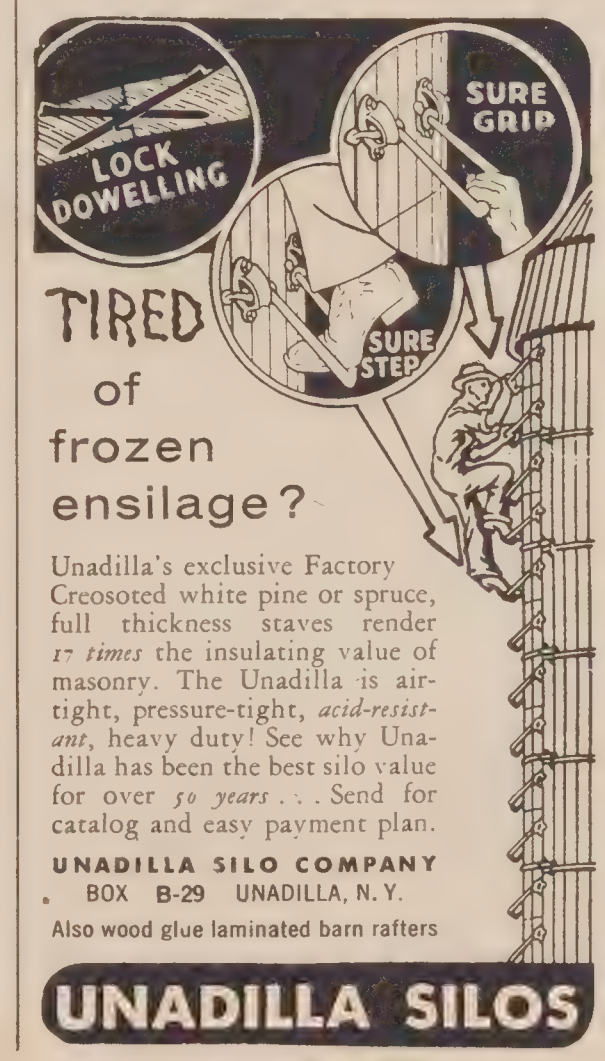
There's an item from the grape-growers' bag of tricks that has proven useful to the person wanting to clean out broad-leaved weeds like dandelion and plantain from his lawn. It's a wax bar impregnated with the amine form of 2,4-D . . . used in the vineyard to control wild morning glory, bindweed, and some other broad-leaved weeds.

Grape vines are tremendously sensitive to 2,4-D . . . so many a year passed before a method was devised to use this chemical close to the vines. Putting the herbicide in a wax "carrier" prevents it from going off in the air (volatilizing) where it might damage nearby sensitive "good" plants, yet the wax layer deposited when dragged across the weed releases 2,4-D slowly into the "baddies." This kind of weeding can be done right up to the most sensitive plants without the dangers involved in other methods of herbicide application on lawns . . . contaminated sprayers, spray drift, volatilization damage, etc.

Some farm and garden stores stock this item. It's manufactured by the Chipman Chemical Co., Bound Brook, New Jersey 08805.



WATER BOOKLET

"Ground Water — America's Priceless Resource" tells the story of underground water resources in clear language which is easily understood by the layman. Originally published by the National Water Well Association, the 20-page booklet is now available from Ground Water Resources Institute, the industry's public information agency.

Copies of "Ground Water" are available to the general public for 30 cents a copy. To obtain booklets, write Ground Water Resources Institute, 205 West Wacker Drive, Chicago, Illinois 60606.

CLASSIFIED ADS

(Continued from page 45)

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Dates to Remember

Feb. 4-5 - American Forage and Grassland Council's 2nd Research and Industry Conference, LaSalle Hotel, Chicago, Ill.

Feb. 5 - Annual meeting Schuyler County Sheep Breeders Association, Watkins Glen, N.Y.

Feb. 5-7 - Cooperative Extension Conference, Cornell University, Ithaca, N.Y.

Feb. 10-12 - Annual meeting State Horticultural Association of Pennsylvania, Hotel Yorktowne, York, Pa.

Feb. 11 - Certified Seed Potato Growers Annual Meeting, Syracuse, N.Y.

Feb. 11-12 - 43rd Annual Raw Products Conference of New York State Canners & Freezers Association, New York State Experiment Station, Geneva, N.Y.

Feb. 12 - Third Delmarva Soybean Meeting, Civic Center, Salisbury, Md.

Feb. 12-13 - Empire State Soil Fertility Association Annual Meeting, Ithaca, N.Y.

Feb. 13-16 - Fact-Finding Conference, Institute of American Poultry Industries, Municipal Auditorium, Kansas City, Mo.

Feb. 20-22 - 46th National Polled Hereford Show and Sale and Annual Convention American Polled Hereford Association, Shamrock-Hilton Hotel, Houston, Texas.

Feb. 24-27 - Turfgrass Conference, Cornell University, Ithaca, N.Y.

Feb. 26-27 - New York State Vegetable Processing Conference, Batavia, N.Y.

Feb. 27 - Roadside Marketing Conference, Rutgers University, New Brunswick, N.J.

Mar. 7-8 - Christmas Tree Growers School, Cornell University, Ithaca, N.Y.

Mar. 14-20 - New Jersey Flower & Garden Show, National Guard Armory, Morristown, N.J.

Mar. 21-22 - 22nd National Conference on Rural Health, Philadelphia Marriott Motor Hotel, Philadelphia, Pa.

Mar. 21-22 - University of Connecticut Block & Bridle Club Annual Little International Livestock & Horse Show, Storrs, Conn.

Mar. 26-28 - First Potato Industry Institute, Farm Show Building, Harrisburg, Pa.

Mar. 27 - Agricultural Leaders Forum, Cornell University, Ithaca, N.Y.

NUTGRASS CONTROL

A new four-page folder describes five Stauffer Chemical Company selective herbicides for controlling nutgrass, as well as most grasses and broadleaf weeds.

For free copies of folder A-1054, "Five Best Ways to Control Nutgrass Along With Most Annual Grasses and Broadleaf Weeds," write: Dept. AA, Stauffer Chemical Company, Agricultural Chemicals Division, 299 Park Avenue, New York, N.Y. 10017.

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Dave Shephard hoses down the 24 stall herringbone milking parlor.

BIG PARLOR

The Shephard Brothers . . . Dave and Don . . . of Cazenovia, New York, are using a herringbone milking parlor that's a single-sided 24-in-line! There are eight milking units, each equipped with weigh jar, and normally two men milk . . . but sometimes three in the wintertime when outside work is minimal. The third man is an employee who has worked for the boys' uncle for 23 years, and 7 for the boys, and who is praised highly by both brothers.

It takes 5 batches of cows before the 120-cow herd is run through the parlor . . . and requires 2.25 hours, plus a half hour to clean up. Aiding that cleanup job is a booster pump especially designed to provide very high water pressure for hosing down the parlor. Two big vacuum pumps together provide plenty of vacuum for milking . . . each could barely handle the job by itself.

More Time

The main reason for the big parlor was to provide cows with time to clean up their grain there . . . and to allow more individual attention to a cow than is feasible in some parlor setups. Maximum grain per milking is 16 pounds per cow . . . to the ones giving 80 pounds per day. Each batch of cows is in the parlor about 25 minutes, and it takes a few minutes between batches. Dry cows are left with the milking herd so they too can be observed closely and fed individually as needed.

Grain fed consists of high-moisture corn plus a protein supplement that provides a mix with 14 percent protein. The Shephards use a 20×27 Harvestore for handling the shelled corn, much of which they buy from growers in Central New York.

Price formula is as follows: Market price of No. 2 dry shelled corn, minus 50 cents per ton per percentage point of moisture over 15 percent, plus hauling charges. Corn is delivered at various times over the winter, and the formula applied to conditions on the appropriate day . . . an advantage to the Shephards in that they don't have to build more grain storage room.

Silo Space

Other silos . . . a 20×60 Harvestore, two concrete-stave (20×60 and 16×50), and a 16×45 at another barn hold silage . . . fed in a feed bunk the year around. Corn silage, haylage, and oatlage have been fed, but the Shephards report palatability problems with oatlage, and plan to discontinue the crop. About 5000 bales of hay are fed in the winter, but Don and Dave want to make as little hay as possible, with more emphasis on silage.

In addition to DHIC herd records, the Shephards use the Cornell Farm Accounting System for monthly and annual reports on their business. It provides management figures on size of business, cost control items, production rates, and labor efficiency . . . compared with year-ago figures for the Shephard farm, and compared to current average figures for all farms in the program. — *G. L. C.*

". . . and I wish you'd stop referring to my kitchen as the 'feeding center'."

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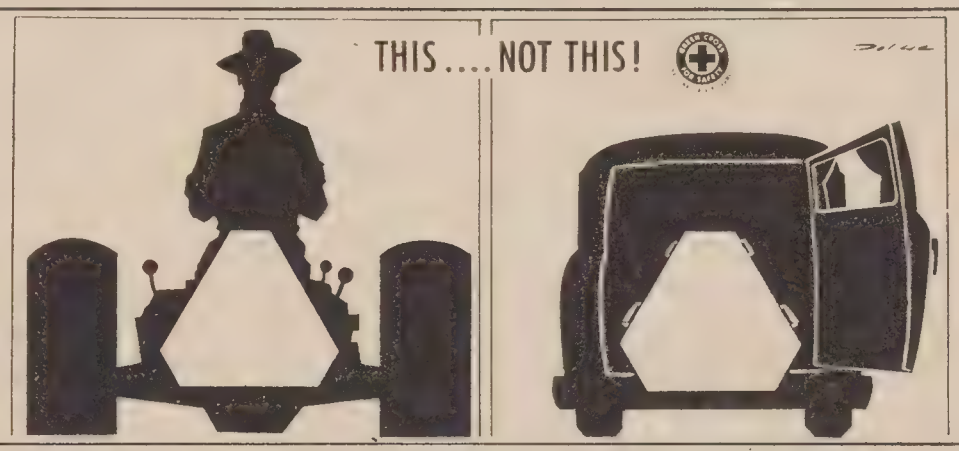

Journey To Day Before Yesterday

By E. R. Eastman

Memory has a happy trick of remembering the good times and forgetting the bad. Readers write in constantly telling how "they have lived and done so many things described in this book," and what fun it is to recall many events that they themselves had almost forgotten.

For a copy of this nostalgic book, well-bound and illustrated, send check or money order for $7.30 (New York State tax included) to American Agriculturist, Book Department, Box 370, Ithaca, New York 14850.

Ed Eastman's Page

LET'S CUT TAXES

When William I, the Conqueror, the Norman king, invaded England and defeated the Saxons at the battle of Hastings in 1066, one of his first acts was to make a survey and a record of all English property for the purpose of taxation.

The Saxons called this record the "Domesday or Doomesday Book," because it spelled out ruin for every taxpayer in England. My old history of England book says of it: "Not a rood of land nor a peasant's hut, nor an ox, cow, pig or even a hive of bees escaped."

About every time I pick up a newspaper and read plans of the politicians to raise more taxes, I think of William the Conqueror's "Domesday Book." It ruined England, and unless we can stop some of the ruinous taxes they surely will ruin America. They already have made a good start.

Almost all of our economic troubles are due to high government spending and taxes. It shouldn't be necessary even to mention what taxation is doing to you and to me. For one thing it causes inflation and high prices for everything we buy. Inflation eats up savings on which old people have depended to take care of themselves without going on relief. Every earner works months every year to pay the taxes before he can have a cent for his family and for himself. The list of evils of what high government spending does to us is almost endless.

Consider the public debt. In 1961 Uncle Sam owed 296 billion dollars. In 1965 it was 321 billion. Now it is around 354 billion and rapidly going higher. You are paying the interest on that. Think of what we are leaving to our children!

For over forty years I have been warning you of the evils of government extravagance. You know from your own experience that if you continued to buy everything you wanted, far beyond what your income justified, you would soon be in bankruptcy. But not so the politicians. They can continue to buy, not with their money but with yours **as long as you let them.** How long is that going to be?

In justice to the politicians, it should be said that they buy what they think you want. As long as we the people keep clamoring for more and more government service, just so long will we have to pay for it. It is up to us, therefore, to call a halt, and this is the best time in many years when we, the people, have an opportunity to demand a slowdown in government spending, because we have a change in government leadership . . . and that leadership is conservative if we permit it to be.

I suggest and emphasize that this is your opportunity to let every local government official, your governor and legislative representatives in congress (both in the senate and house of representatives) know how you feel about spending.

On this page in the next several issues I will discuss briefly government plans, undertakings, and projects where I think many millions of taxpayers' money can be saved without destroying essential service or holding up real progress. You may not always agree with me, but when you do agree I suggest that you use all your influence, through your organizations and directly, with your government representatives to see if we can't get something going that will result in the reduction of taxes.

Reduce Space Explorations Costs

This time let's think about the millions that are being spent in space explorations, including attempts to go to the moon.

Explorations, of course, are important. We opened up America that way. But let's put first things first. Right now we surely have projects more important on earth than we do on the moon. Why is it so necessary to keep up with Russia? It sounds to me like the old idea of keeping up with the Jones's. Let's cut down the millions we are spending on space exploration. We can't afford it.

* * * * *

In any of these talks about economy, I am not suggesting that we cut them out; I am suggesting that we cut them down until we can afford to pay for them, when money is so badly needed for more important projects.

What do you think? Don't tell me, tell it to the men who vote the appropriation of your tax money.

WE ALL NEED HAPPINESS

Sometime ago I asked a young lady at the American Agriculturist office who receives the orders for "Journey to Day Before Yesterday" and forwards them to the publisher, how they were coming in. She said they were coming so fast that she was almost buried and could hardly keep up with them.

Of course that pleases both the folks at American Agriculturist and me very much, because we know that the book is making so many people happy.

We are finding out that there are a lot of lonesome, worried and dissatisfied people in the world in these fast-moving, complicated times whom the book "Journey to Day Before Yesterday" helps to forget their worries and troubles and relive their youth again.

I have been pleasantly surprised also that so many young and middle-aged people like to read "Journey to Day Before Yesterday" to find out how grandpa and grandma lived, worked and had fun when life was young and less complicated.

To get a copy write to Department Book, American Agriculturist, Savings Bank Building, Ithaca, New York, 14850. The cost is $7.30, including tax.

See article on this page entitled "A Place of Peace." Picture courtesy of Reniff C. Merriman of Unadilla, New York.

STAND UP TO MILK

Last summer a farmer was showing me with some pride how, with the use of modern barn equipment, he was able to take care of their milking herd of 40 cows without any help. I asked him what he was going to do next to cut down the labor in the barn. He said he was now pretty nearly forced to install a milking parlor.

"Although I'm a young man," he said, "I'm beginning to realize that my knees can't stand it much longer to get up and down so many times to operate a milking machine with such a large dairy. With a milking parlor, I'll be able to stand up and do the work."

I'll bet there are hundreds of other dairymen who feel the same way. Farming on a modern scale brings new problems all their own.

A PLACE OF PEACE

One time many years ago when I was a county agricultural agent I came, late one fall day, to a country church, much like this one in the picture. I was a long ways from home, tired and discouraged.

Acting on an impulse I stopped the car, pushed open the unlocked church door, and went in and sat in one of the old pews. It was quiet in there, and the soft autumn sun spread its gentle rays through the colored windows.

After a while I must have slept, for when I awoke it seemed to me that someone had actually said to me these comforting words:

"Peace I leave with you
My peace I give unto you
Not as the world giveth
Give I unto you.
Let not your heart be troubled
Neither let it be afraid."

It took a moment to bring myself back to reality when I awoke. But the feeling of rest, peace, that all is well that the experience gave me comes back whenever I remember it, and when I see a country church like the one on this page.

EASTMAN'S CHESTNUT

My friend, Mr. Harry C. Hill of Kittanning, Pennsylvania, sends the following which gave me a laugh . . . and I'll bet it will you:

A woman walked into a large department store. The floor walker was very bow-legged, and he asked what he could do for her. She told him that she would like to look at some handkerchiefs.

"Just walk this way, ma'am," he said. The woman looked at his legs. "No, sir," she replied indignantly, "I'd die first!"

SERVICE BUREAU

For The Northeast Farmer

by M. A. Parsons

MOVED ON

"In a local newspaper there was a classified ad from Jamster Industries of Sault Ste. Marie, Michigan, for women sewers to do simple sewing at home. It says that the company supplies materials and pays shipping.

"I wonder if this might be one of the companies against which I have read warnings in your columns from time to time. My daughter would like to make a little extra money, but we don't want to get involved with a disreputable firm."

We have never recommended any homework companies, because it has been our experience that they are more interested in getting a sum of money for a little information or a few materials than they are in helping an individual to make money. Many of them promise to furnish you with work at home, but the first thing they want is money.

It is our understanding that Jamster Industries charged $2.50 for a "test kit" which would be refunded if one started to sew for them.

The Detroit Better Business Bureau received complaints from all over the U.S. Some women did not receive the test kit; and many who returned the kit to the company for a refund did not receive it.

Jamster Industries was established in March of 1968. As of August 9, 1968, mail to them was returned by the Post Office marked "Out of Business." We are told they have left the U.S. and are now working out of Sudbury, Ontario, as North American Mailing Service.

DEBT POOLERS

Atlantic Associates of Providence, Rhode Island, and Phoenix, Arizona, and three employees were indicted by a Grand Jury in Phoenix on 15 counts of fraud.

The indictment accused the three of advertising that they would provide a service to debtors when the "intent was to do nothing in behalf of debtors." They were ordered to appear before a judge to answer charges that they "devised a scheme and artifice to defraud" and "for obtaining money and property by means of false and fraudulent pretenses."

We have had many inquiries about and some complaints against this company in the past. They were engaged in the business of "debt pooling." This is an activity in which you agree to turn over a portion of your earnings to them and they will distribute the funds to any creditors who agree to the plan. They charge a fee, usually based on the total amount of the debt, which becomes payable regardless of the success of the plan.

Almost never is the plan carried to a successful conclusion. Either the creditors fail to go along with the arrangement or the debtor finds it impossible to carry through.

The National Better Business Bureau has actively campaigned against debt pooling for many years, and they say "the scheme has the effect of sinking the person already heavily burdened with debt into a financial quagmire."

Commercial debt pooling has been outlawed in a number of states, including most of the Northeast.

ADDRESSES WANTED

Gregory Commes, last known to be living in Miami, Florida, or any member of Commes family.

* * *

Raymond Paul Kramer, formerly of Hamburg, Pa. Last heard from living in New Jersey.

* * *

James Patterson, originally from Indiana. During 1st World War lived for a while on Spring Garden St. in Philadelphia, Pa.

* * *

Mildred Parker Williams who in 1915 worked for Rutherford, Lockport, N.Y. Worked in Buffalo in 1945.

* * *

Lee Graves, formerly of Silver Creek, N.Y. Last known to be in Warren, Pa.

* * *

Descendants of Timothy and Ruth (Latham) Forsyth who lived in Montville, Conn.

* * *

Descendants of John Wiltsie who was born about 1840 in New York State. Married to Mary McNeeley.

* * *

Ruth, Ralph or Orpha Williams formerly of Pattersonville, N.Y.

* * *

Rev. Kendig B. Cully who lived in Southwick, Mass. about 30 years ago.

* * *

Descendants of Elias Williams who lived in Campbell and Mead's Creek, New York.

* * *

Would like to hear from anyone by name of Russett (or their relatives), Dorwin J. Russett, Rancocas Rd., Burlington, N.J. 08016.

* * *

Descendants of Cornelius and Alida Van De Veear (daughter of Garret Van De Veear of Montgomery Co., N.Y.)

Local agent Claire Reynolds of Palmyra, N. Y. delivers North American disability and medical expense benefits of $1600.00 to Hazel A. Vanderwall also of Palmyra.

HIT BY TRAIN AND LIVED TO TELL IT!
84 DAYS IN HOSPITAL

A fast moving train crashed into her car tearing it into pieces. Many broken bones and serious injuries required 84 days in the hospital and many more days of recuperation at home. Mrs. Vanderwall says, "I would like to thank the North American Accident Ins. Co. for the settlement for the many weeks I was in the hospital and disability income at home. I appreciated it very much. It sure is great protection."

Carry a combination of policies to provide benefits for:
• Weekly income while in the Hospital and at Home.
• Medical Expenses. • Loss of Life and Limb.

Nellie B. O'Dell, Andover, N. Y. Fell off step ladder—inj. ribs.	$ 113.00
Ella Shaver, Kirkwood, N. Y. Slipped on ice—broke wrist	127.14
Violet Shafer, Olean, N. Y. Slipped on icy spot—broke arm	325.50
Marie Tingue, Delevan, N. Y. Slipped and fell—inj. knee	315.00
Robert Christopher, Locke, N. Y. Kicked by cow—injured elbow	319.94
Harry Gehr, Sherman, N. Y. Tractor tipped over—inj. hip	360.66
Rosa Kasube, Erin, N. Y. Slipped on ice—inj. back	120.00
Marshall G. Seymour, Greene, N. Y. Caught in mower—injured hand	1077.44
Dennis Gadway, Mooers Forks, N. Y. Auto accident—inj. neck	280.67
Carole Wright, Homer, N. Y. Fell from horse—cut face	261.56
Claire H. Pierson, Marathon, N. Y. Sharpening knives—cut hand	1124.37
John Svegl, Bloomville, N. Y. Fell on ice—broke ankle	207.14
John W. Aitkens, Delhi, N. Y. Caught in sander—injured hand	158.56
Robert Meyer, Springville, N. Y. Fell from wagon—inj. knee	289.12
Naomi Keough, Churubusco, N. Y. Caught on steering wheel—inj. finger	197.12
Rexford Miller, LeRoy, N. Y. Fell—inj. back	441.42
Isabel Huffman, Mohawk, N. Y. Slipped on sidewalk—inj. ankle	122.99
Elsa A. Austin, Carthage, N. Y. Fell—broke arm	412.90
William Zecher, Carthage, N. Y. Auto acc.—cut scalp, lip & nose	243.70
Joseph Odda Robbins, Carthage, N. Y. Cranking tractor—broke wrist	192.14
Dora Graves, Castorland, N. Y. Tractor, auto acc.—inj. scalp, knees	231.28
Clinton Edick, Turin, N. Y. Fell from tractor—inj. hip	244.26
Marcella Livermore, Bouckville, N. Y. Slipped on ice—broke wrist	227.14
John Balbian, Amsterdam, N. Y. Auto accident—broke nose	184.06
Richard Frazee, Fabius, N. Y. Fell from wagon—broke leg	$ 185.68
Josiah Shetler, Holcomb, N. Y. Ram charged—injured knee	155.64
William Peters, Phoenix, N. Y. Fell on ice—broke shoulder	130.18
James Andrecheck, Richfield Spg's, N.Y. Fell playing volleyball—broke wrist	143.80
Sherman Herrington, Hoosick Falls, N.Y. Knocked down by cow—inj. shoulder	288.68
Betsy J. Webb, Edwards, N. Y. Attacked by cow—broke arm	152.82
Mary White, Norfolk, N. Y. Slipped on ice—inj. back	198.56
Harold S. Hall, Sharon Spa, N. Y. Kicked by cow—broke nose	230.36
Robert S. Myers, Jr., Cayuta, N. Y. Auto acc.—inj. neck	127.00
Lee Oles, Jasper, N. Y. Playing basketball—broke tooth	100.00
Merle MacDougal, Avoca, N. Y. Thrown off tractor—broke rib	230.00
Ivan Learn, Cameron Mills, N. Y. Tree fell—injured back	293.00
Herbert Lindhorst, Nichols, N. Y. Fell in front of wagon—inj. knee	104.28
Walter Alexander, Groton, N. Y. Fell—head injuries	538.11
William Bauer, Ontario, N. Y. Fell off ladder—cut head, broke ribs	212.85
David Johnson, Newark, N. Y. Playing ball—broke nose	153.93
Francis Reynolds, Dundee, N. Y. Auto acc.—inj. head, back	360.81
Dale Kipp, Warren Center, Pa. Fell off bicycle—broke wrist	213.75
Anthony Falkowski, Edinboro, Pa. Board fell—inj. shoulder, cut scalp	117.14
Richard Vander Ploeg, Sussex, N.J. Bulldozer accident—loss of life	2250.00
Charles Krasnecky, Hardwick, Mass. Thrown off tractor—inj. shoulder	320.14
Robert Plourde, St. Albans, Me. Auto accident—inj. ribs, chest	171.42
Edith Ackerman, Benson, Vt. Slipped and fell—broke arm	266.15
Celesson Billado, Fairfax, Vermont Loading plate fell—inj. foot	105.00

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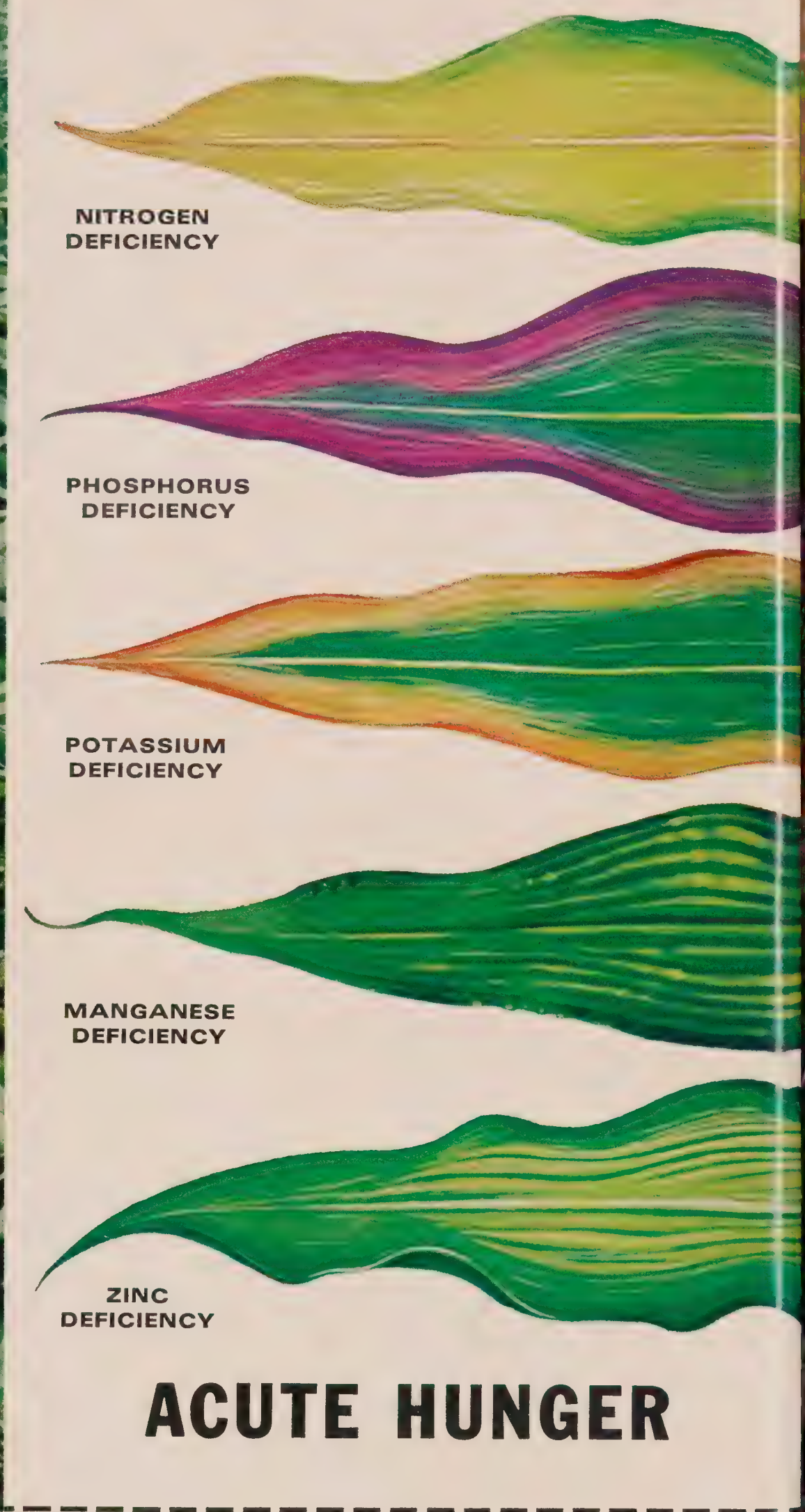

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Royster Company, Norfolk, Va. 23501

For The Northeast Farmer

MARCH 1969

American Agriculturist
and the
RURAL NEW YORKER

These three silos (an Agway-Craine on the left) almost trace the growth of this farm. As corn production expanded, so grew the herd. Each silo is full of corn silage—enough to feed each cow 45 pounds daily for a full year. "There'll be no need to feed green chop next summer," commented Mr. Schofield.

"When land is as expensive as ours, you can't operate profitably with antiquated ideas or equipment.

Agway's Dairy Enterprise Service helps keep us up to date."

Robert Schofield, Westfield, N.Y.

Agway's Dairy Enterprise Service is a continuing force in maintaining the profitability of the Schofield farm.

Through Agway, Mr. Schofield gets sound advice on crop planning, fertilization, feeding, utilization of capital. Agway complete crop programs and recommendations are usually followed to the letter, including such practices as direct seeding of alfalfa, high population in corn plantings, chemical weed control, soil testing and correct fertilization for the desired yield. Corn silage yields typically average 20 tons or more.

Agway buildings and automated equipment make it possible to feed, milk and bed an average of 75 cows in less than three hours a morning. Included in these chores is a thorough cleaning of 400 feet of pipeline and associated equipment.

"Agway's automatic pipeline cleaner saves me a minimum of $750 a year," says Mr. Schofield. "And it has cut our already low bacteria count in half."

Mr. Schofield had been buying a high-energy Agway feed. Agway's computerized Profile report on feed conversion showed him that energy levels in his hay and silage were better than he'd estimated and that he could change to a lower-energy feed costing $7 less per ton. "When you're feeding 20 tons a month, that saving adds up in a hurry. In a single month it more than paid for a whole year of Profile reports," said Mr. Schofield.

Al Gaus consults with Mr. Schofield at least twice a month. "This is great," Mr. Schofield explained. "Al knows all about the current Agway specials on seed, fertilizer, lime and chemicals."

If necessary, Al Gaus brings in other Agway specialists to cope with difficult problems: cows suddenly going off feed for no evident reason, or symptoms of unusual trouble in corn or alfalfa stands.

"To sum up," said Mr. Schofield, "through Dairy Enterprise Service, I've got a business advisor to keep me informed. Through Al Gaus I have access to ideas, knowledge and specialists in every phase of farming."

Want to know more about Agway Enterprise Service? It includes Profile, which provides farmers with a wide variety of computer-generated management reports that not only reveal the month-by-month state of the business, but also provide alternate routes to any given goal. Reports such as Monthly Herd Profiles, Group Feeding Profiles, least-cost feed formulations and others point to more efficient utilization of land, labor and capital.

For the fact-filled story of Enterprise Service and what it can do for you, see your Agway store manager or representative or write to N. E. White, Agway Inc., Box 1333, Syracuse, N.Y. 13201.

FARM
ENTERPRISE SERVICES

Agway

Profile Management Services; Feeding Programs; Complete Crop Service; Turn-key Building/Automation Plans and Construction; Herd Health & Sanitation Programs; Members Insurance Service; Complete Petroleum Service.

Dairyman Robert Schofield farms about 400 acres near Westfield, N.Y., in the heart of grape country. His registered herd averages 16,000 lbs. of 3.5 milk, makes dairying competitive with grapes on his farm.

Says Bob Schofield: "Our aim is to get this bulk tank as full as we can every day. And to get back more for our milk than we pay for feed and expenses. Agway's Enterprise Service really helps."

Bulk deliveries of Agway feed are scheduled 90 days ahead at known prices. Monthly Profile computer readouts cut Bob's feed cost by $7.00 per ton. That's Agway's Al Gaus standing on the right.

Would you believe —I paid less than $100 for my Lincoln 225 Amp Arc Welder!

"And at this price I can't afford to be without one. I can make my own arc welding repairs without going to town or waiting—and this saves money, and maybe a crop!

"Learning to weld was easy. I picked up the general idea on the simpler jobs by myself and then signed up for a short course at the high school to improve and learn the details.

"This little machine is as useful as my hammer and saw or wrenches. With it I can repair broken parts and build special equipment of all kinds. I can weld, braze, solder, hardsurface, heat, cut metal and even thaw frozen water pipes."

You, too, should own a Lincoln welder. They have been proven in service for over 60 years. The 225 amp farm shop welder shown will run on 230 volt single phase rural power lines. You get it complete with all accessories, electrodes, power cord, instruction books, ready to plug in and let you start welding.

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For The Northeast Farmer

American Agriculturist and the RURAL NEW YORKER

Vol. 166, No. 3

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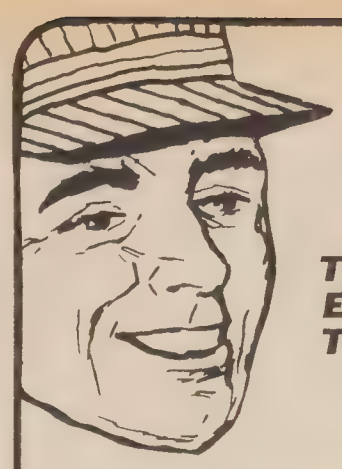
OUR COVER

"Where fragrant steam ascends on high to form the clouds that scent the sky." This sugarhouse is on the farm of Lyman and Kenneth Graves, Conway, Massachusetts. Photo: Herbert Shumway



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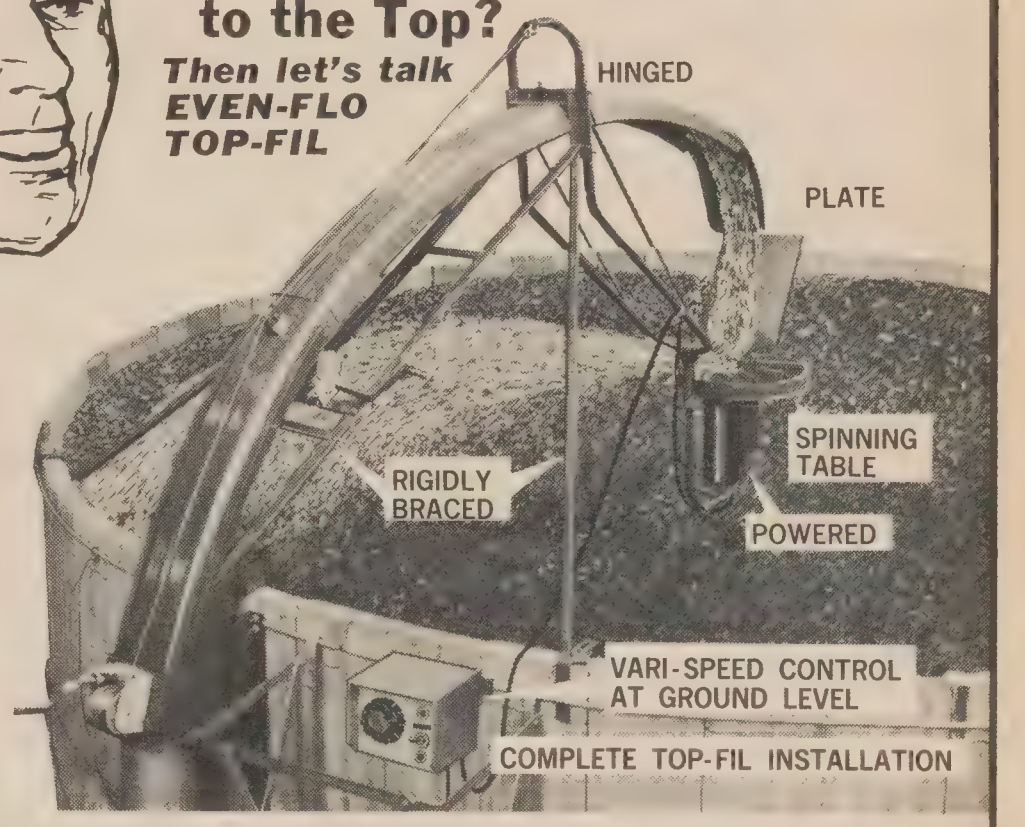

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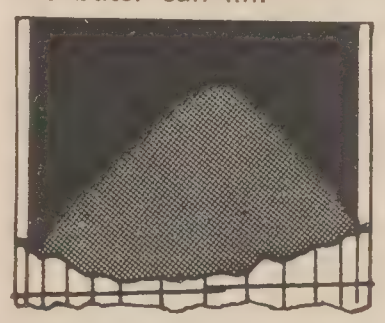

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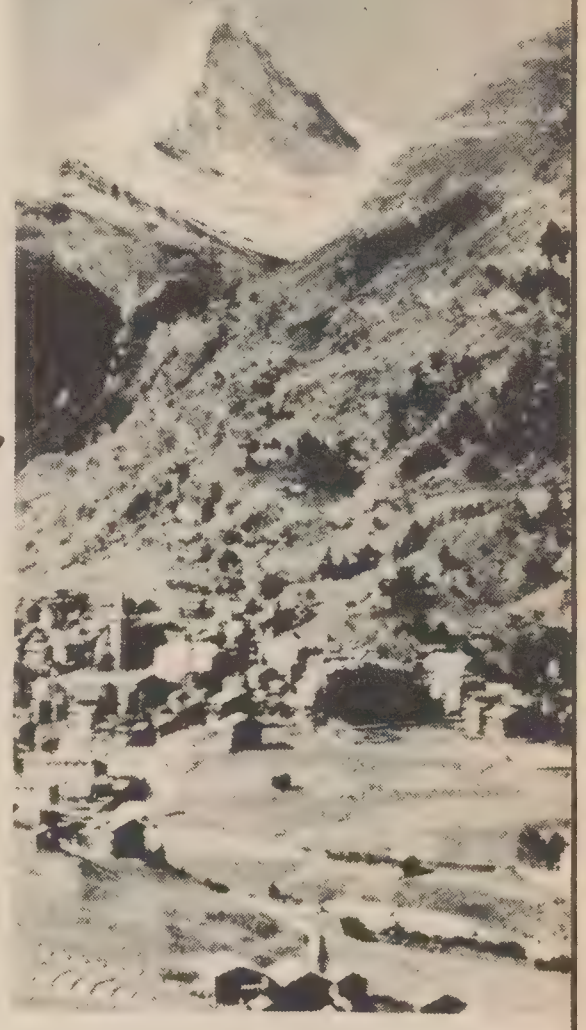

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EDITORIALS

by GORDON CONKLIN

POSITIVE LETTER

Two out of three dairymen shipping milk to Order 2 (N.Y.-N.J.) markets are participating in the fluid milk promotion programs of the American Dairy Association and Dairy Council of New York. This is an improvement over past years, but still far below the participation level of New England farmers. A positive letter goes to all Order 2 dairymen every year . . . unless a "no" instruction is returned, deductions for milk promotion are taken out.

Some dairymen, lulled by the present favorable milk-feed price ratio. . . and by the failure of filled milk to catch on . . . tend to "let Joe do it." Joe, in turn, resents the fact that he's carrying the load while his noncontributing neighbor makes a down payment on a snowmobile with the money he didn't give to ADA-DC.

Filled milk hasn't really gone away . . . any more than oleo really went away during the 1920's and 30's. The need for product development and milk promotion is more pressing than ever.

If Order 2 Class I sales in 1968 are compared to the 5-year average of fluid sales, there is plenty of evidence that the present milk promotion program is paying off.

When that positive letter comes, be positive by refusing to be negative!

THE STRAW MAN

The National Farmers Union has been persistently crying out that the sky is falling on the barnyard . . . and that corporate giants are in the process of taking over agriculture.

A report by the Economic Research Service of the USDA, however, leads to the conclusion that the family farm still dominates the scene in the U.S. Studying 22 states, in the central, mountain, and Pacific parts of the country, the ERS found only one percent of the farms . . . and 7 percent of the land in farms . . . owned by corporations. The figures show that 71 percent of these corporations were family corporations; 10 percent were individually owned . . . only 19 percent had diversified ownership.

Nearly one-half (45 percent) of the corporations involved were organized prior to 1960 (the famous Kern County Land Company was founded in 1849, and the King Ranch in 1853). Only 4 percent of total cash receipts from farm marketings in the 22 states were recorded by corporations owning farms.

Now it's true that there are some awfully "big ones" . . . particularly in cattle feeding, egg production, and broiler raising. Land has increased in value so long and so fast that it looks like an attractive investment for risk capital . . . especially because it offers some tax advantages when used for farming. Also, the return on investment has long been very attractive to those with the managerial skill to do the top job, and many a corporate executive believes his company has that skill. Furthermore, many businesses serving agriculture have chosen to buy one or several farms for product-research purposes.

I **do** think income tax loopholes should be closed so that farming is less attractive to corporations (or individuals) merely seeking tax advantages. But the family farm . . . incorporated or otherwise . . . has not been booted out by impersonal corporation giants. My guess is that family farms will continue to dominate the rural scene for the foreseeable future.

And it's my opinion that our national policy should be geared to maintaining that dominance . . . partly because of the need for decentralized decision-making and diffused economic power in the organization of our society. A considerable argument rages over the question of whether farm people possess any inherent moral superiority over their urban neighbors, but it looks to me as though the family farm offers the U.S. some social stability and moral values that our fouled-up society can hardly afford to lose.

WRONG BARN

The United States Department of Agriculture has slightly more than 100,000 employees . . . about 1 for every 10 of the 1 million truly commercial farms. Its budget hovers around $6 billion annually . . . and taxpayers complain that this amounts to $6,000 per commercial farm!

One of the reasons why the USDA looks so out of balance is that there are a lot of federal expenditures placed under the "agriculture" umbrella that really shouldn't be there. USDA meat inspection services, for instance, could logically be shifted to the Food and Drug Administration.

The Forest Service is an agency whose activities benefit primarily the general public, rather than just farmers. Why not move Smokey the Bear to the Interior Department where he belongs?

Food Stamps, school lunches, and other welfare programs should be carried in the budget of Health, Education and Welfare . . . rather than in that of the USDA. In recent years, the Department of Agriculture has moved massively in the direction of greater emphasis on welfare programs of many kinds . . . sharply diluting its agricultural function.

For the sake of agricultural public relations . . . as well as governmental efficiency . . . it seems to me the USDA should be reorganized. Hopefully, the new administration will be able to get the federal horses sorted out and get each one into the barn where he belongs.

WHY CHEAPER?

Two releases, both dated the same day, came across my desk recently. Entitled "Cornell University News," one told of the development at Cornell of a method of synchronizing estrus in dairy cattle . . . and the other of a "significant breakthrough" in mastitis control.

A common denominator of both releases were these phrases commenting on the expected benefits: ". . . which could lead to reduced meat and milk prices . . ." and ". . . not only would result in greater profits to dairymen but also bring about cheaper milk for the consumer."

Some time before that, I ran across this statement in a weekly news magazine, reporting on living costs (italics mine): "However, housing costs continued to climb *and food prices fell less than usual for the month.*" And an editorial in the Wall Street Journal . . . which I suppose would call a 10 percent increase in General Motors profits "moderate" . . . reported that a cent per quart rise in New Jersey retail milk prices "surely is exorbitant."

There is a massive amount of evidence that the fruits of farm technology over the past quarter century **have** largely been passed on to the consumer. Output per farm worker has soared . . . but the economic benefit has been all in favor of the consumer, so that he spends, on the average, only 18 percent of his disposable income for food.

My point is not to pick on Cornell University, the Wall Street Journal, or their news writers . . . but rather to point out the general orientation of 95 percent of our national population. "Cheaper food for the consumer" is the primary goal . . . not "better incomes for farmers."

When approaching such issues as farm bargaining power, farmer organization, and government farm programs, farm people should remember this fact of life.

GREAT TRAIN ROBBERY

Even though a modern railroad engine has no coal to shovel and no fire to tend, the Brotherhood of Locomotive Firemen and Enginemen want to turn the diesel clock back to the steam engine era. The union is fighting to force railroads to fill the 18,000 firemen jobs eliminated by the 'roads only after endless litigation, and with the involvement of the President and Congress.

Featherbedding has long bugged the railroads. This latest attempt to enlarge the mattress would be of only academic interest to northeastern farmers, except for one thing . . . they pay a lot of freight costs. If the fireman goes back into every engine, then the freight bill to every farmer goes up sooner or later.

Not long ago, I visited with a man who teaches a college course in food distribution. He reported that a vice president of a meatcutters' union had spoken to his class one day, and was asked about central meat processing versus having a meatcutter in every store. He replied, "Sure, central processing makes economic sense . . . and we'll fight it to the bitter end!" Job security is one of the gut issues of unionism, and understandably so.

Farmers have a stake in removing the featherbed from the backs of industries serving them. The railroads could well stand some support from farm organizations on this one.

NO SWEAT

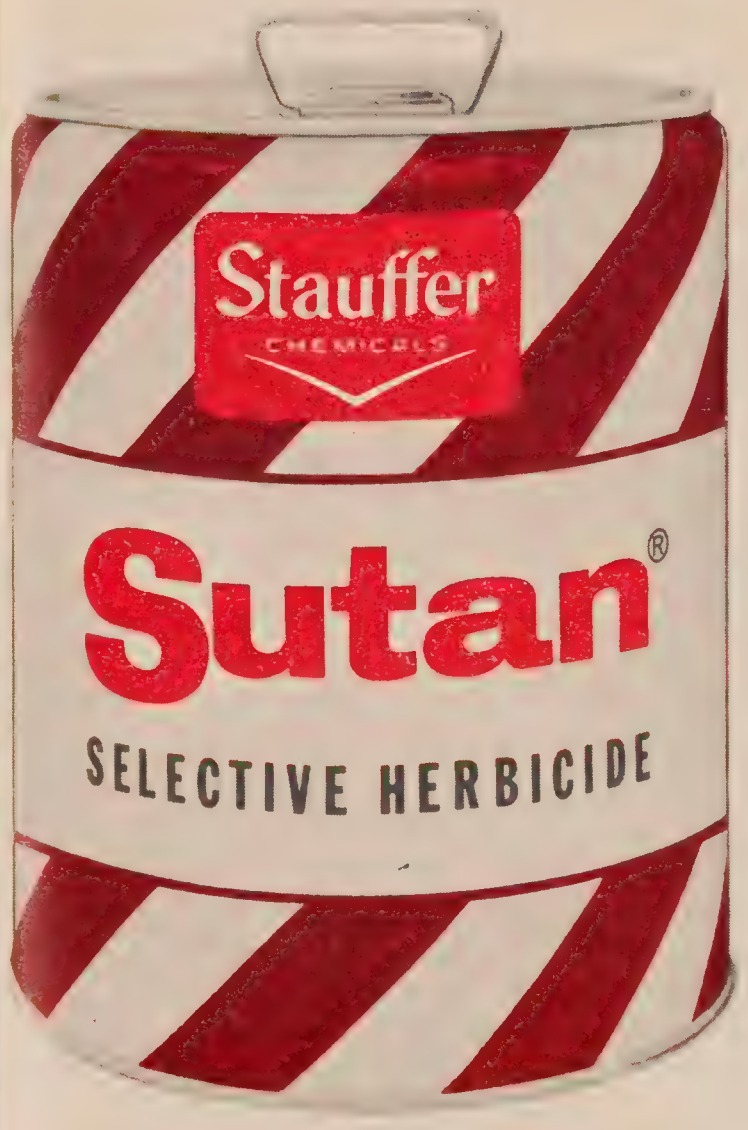
Once upon a time, a group of motivation engineers sat down to brainstorm the development of a new after-shave lotion. Sales of Low Judo were at a new low, and Fade East had faded . . . there was a crying need for a new product that for a time would entice men into thinking it would entice the girls.

After an exhaustive probing of the human psyche, one of the motivationeers cried, "I have it! The modern urban man sits in a chair, rides in cars or golf carts, reclines in airplane seats . . . and therefore sheds not a drop of working perspiration.

"We'll make an after-shave product that carries the odor of 'honest toil.' It will remake the user's image into one of sweating virility and perspiring stamina . . . creating visions of rough and ready cavalrymen on the trail of Geronimo . . . of romantic cowboys sweating along the Chisholm Trail."

And so the sensation of the locker room . . . Right Rank . . . was born.

what do you get that's new with



"the grass-getter" for corn?

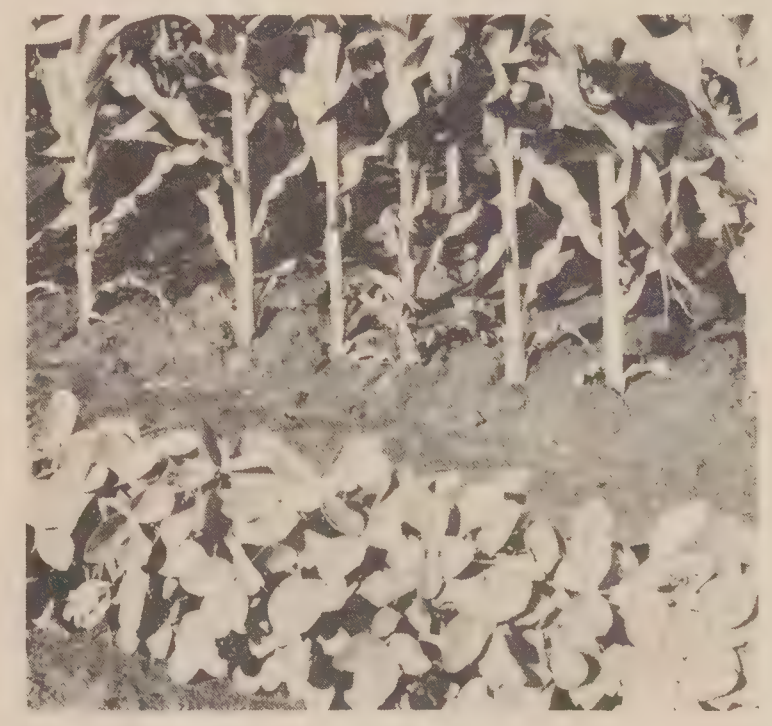
You get what growers are calling the most effective pre-plant selective herbicide yet developed for grass control in corn. A material that's compatible with *most* liquid fertilizers and soil insecticides. (Check compatibility prior to use.) You get control of grasses like yellow, green and giant foxtails, goosegrass, barnyardgrass (watergrass), Johnsongrass from seed and nutgrass (nutsedge). You get significant savings in time and labor by reducing cultivations. You get a crop that's cleaner, faster and easier to harvest. Used as directed, SUTAN leaves no harmful soil residues in your fields after harvest. You no longer have to contend with carryover problems that interfere with your cover crops or rotation program.

SUTAN, applied and mixed immediately into the soil, before you plant, is not dependent on rainfall to carry it into the weed seed zone. It's there working when grass seeds start germinating.

Corn, ground and SUTAN . . . that's all. This 1968 broadcast application tells the story. One application, one cultivation later in the season and a top-yielding crop . . . and no harmful soil residues.

Let it rain. SUTAN is on the job . . . where it was put . . . in the weed seed zone. And it keeps on working even when you can't get into the fields to cultivate.

When was the last time you saw a check like this? On the left, SUTAN, a lot of rain and no cultivation. On the right, same field, same rain, no SUTAN. Any questions?



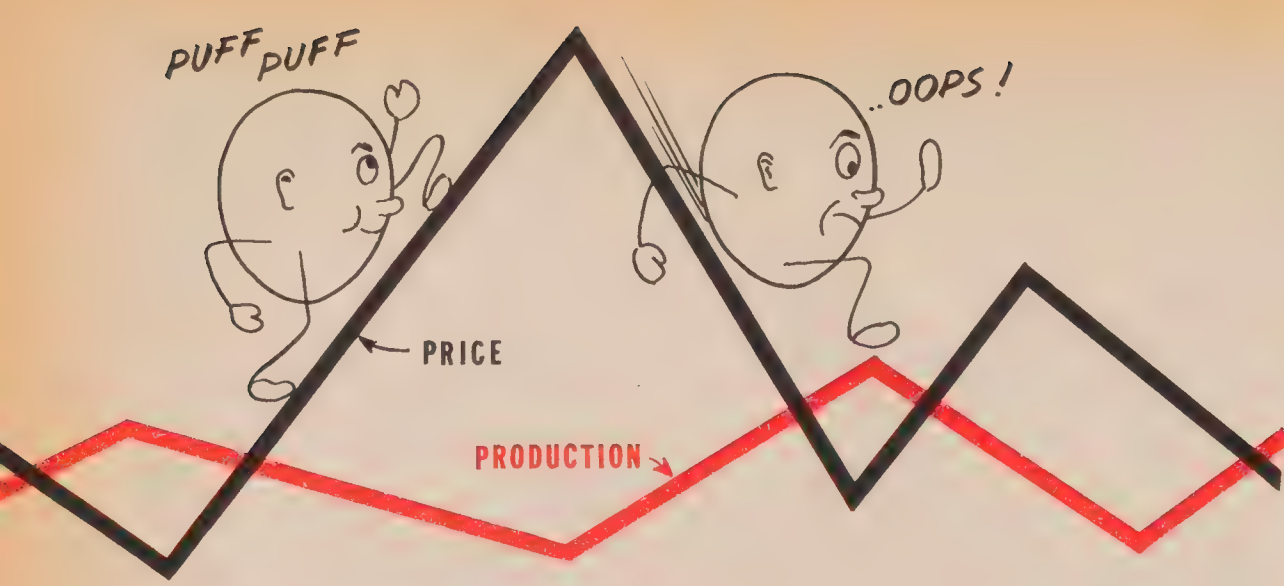
Corn this season and soybeans next . . . in the same field? Why not. No harmful soil residue problem to interfere with your rotation program when SUTAN "the grass-getter" is used as directed.

SUTAN/Atrazine COMBINATION. If grasses and broadleaf weeds are your problem, SUTAN 6-E in a tank-mix combination with atrazine can be applied and immediately incorporated before you plant, for a brand-new kind of control. The combination controls more weeds and grasses than either material will control alone. The problem of atrazine residues that you used to have is significantly reduced since lower rates of atrazine can be used. Or, use SUTAN alone and still get broadleaf weeds with a post-emergence application on 2,4-D.

Get all the news that's new on SUTAN from your Stauffer dealer. And tell him you want to order your season's supply now. Stauffer Chemical Company, Agricultural Chemical Division, 299 Park Avenue, New York, N.Y. 10017.

Read the label, heed the label and
GROW WITH STAUFFER CHEMICALS

Stauffer
CHEMICALS



WHAT PRICE EGGS?

by Dr. J. C. (Johnny) Huttar*

NO matter how you slice it, we have a system of egg price determination and quotation which was established almost 100 years ago. Aside from changes in grades of eggs for which prices are quoted, the system is essentially the same as it was when the New York Mercantile Exchange was established in 1872. At the time, this was a very progressive step.

In 1872, practically every farmer in the country kept a flock of hens. The flocks were small; very few consisted of more than 500 layers. Most of them had a surplus (above family needs) of eggs to sell . . . mostly in the spring and early summer. The prevailing system for marketing these eggs was about as follows:

- Farmers bartered eggs for groceries, or sold them to a country dealer.
- Groceryman or dealer assembled the eggs and packed them into 30-dozen wooden cases, which he sold to a city wholesaler.
- The city wholesaler sold some to local retail merchants, and shipped the rest in railroad carlots to a large consumer market like New York City or Chicago.
- The wholesale receiver hired a crew to grade the eggs for interior quality and size, as well as shell cleanliness and soundness. He sold them to jobbers, retail merchants, hotel and restaurant owners, commercial bakers, and mass feeding institutions.

In 1969

Today, most eggs are produced on large, specialized units that keep flocks ranging in size from 5,000 to 2,000,000 hens. The eggs are much finer in both interior and exterior quality. Many are candled and carton-packed at the farm.

Some of the eggs still go to wholesale receivers in large markets like New York City. An increasingly larger portion, however, go directly from the farm to large retail organizations and mass feeding institutions, like hospitals, military bases, etc. Most importantly, they by-pass the wholesalers whose trading activities are still used as the basis for price quotations.

The system established under 1872 conditions was not only something tangible which producers and competing marketers could use, but was fair to both sellers and buyers. Therefore, an understandable confidence was created among all concerned with it. This general satisfaction continued for the next 75 years.

Now, can you honestly blame the people engaged in marketing for not wanting to give up such a good thing unless and until something which promises improvement is suggested and tested? Most market men have a big financial stake in their operations; competition among them is keen, be they wholesale dealers or chain store operators. There is little room for error, because their operating margins are now much smaller than they used to be.

On the other hand, most people who understand the situation know that an 1872 system needs some adjusting to serve 1969 producers and marketers with equal fairness and satisfaction, as it did at that time. It's time for a change . . . but not by grasping at the first proposal from someone frustrated and hurt by 18 months of low egg prices, guided more by emotion than understanding.

Slow Change

Changes are slow; whatever new system is developed, it's likely to be with us for a long time. If it takes too little account of the balance of supply and demand, it will fail.

A key question which hasn't been asked seriously nor given enough consideration is this, "Which has the greater effect on price, supply or demand?" The answer is **supply** . . . its fluctuations are much wider. Demand adjusts to supply, but in and of itself, demand is quite constant.

When supplies are cut, it puts more pressure on price in an attempt to satisfy its desire, but when supply runs ahead of the normal level of demand, it takes a considerable price drop to start soaking up the surplus. Demand increases slowly, and this prolongs the period of low prices.

Any new system of price determination must have its deepest roots in, first, more accurate knowledge of how big the supply is and whether it is increasing or decreasing, and then developing a way to do something about it.

A legitimate question is, "Does the **system** of establishing price quotations cause them to fluctuate too much, or is it **over-and-under-production?**"

Agitation

Most of the agitation for change in price-quoting has come in the last 20 years. In only three or four widely-scattered years has it been vigorous. They were the years when prices dipped below the average cost of production and stayed down for many months . . . the last two such years were 1959 and 1967.

The main pressure for change comes from producers, and understandably so; they are the ones most hurt by the depressed prices. It's the **same system,** though, that quoted the profitable prices of 1966 and the prices of the last six months, which producers like and to which no one, not even the consumer, objects.

Now, don't get me wrong . . . I'm not saying the system is A.O.K. (to borrow some military jargon). I'm convinced that it hasn't adjusted fast enough to serve the present needs of a vastly-changed production and marketing reality. What I am saying is let's look at **all** the things which make up the system and find out where the weak spots are. Then . . . and only then . . . can we improve it.

Criticisms

Let's look at some of the criticisms leveled at the present system for determining price, and then at how it actually works.

Criticism 1—"The volume of eggs traded on the Mercantile Exchange is dropping and does not fairly represent supply and demand conditions."

Fact: In Cornell Bulletin 1021, by Drs. Darrah, Forker and Miller, the following figures are published. They show the average yearly number of cases of eggs sold on the Exchange in the last 20 years as follows:

1947-'51	29,377
1952-'56	66,305
1957-'61	68,548
1962-'66	78,647

Criticism 2—"The Exchange establishes egg prices."

Fact: The Exchange never has and doesn't today establish or publish egg prices. Most market men also obtain information daily on outside trading, supplies and movement of eggs toward the New York market. They have good knowledge also of the movement of eggs in retail channels in the metropolitan area. From this, and their own inventory position, they decide what each grade is worth. They use the Exchange as a place to test their judgment by offering eggs for sale or bidding on lots which are offered.

Criticism 3—"The Urner-Barry quotation is based entirely on Exchange trading."

Fact: The Urner-Barry Company . . . using Exchange trading figures, plus extensive daily reports of transactions, inventories, supplies and demands over a broad area of the country . . . determines price quotations which in the judgment of their reporters represents the bulk of the trading for various grades of eggs.

Because the Urner-Barry determination of price is based on approximately the same total information as are the bids and offers on the Exchange, it's natural that the quotation would agree with the trading on most days. However, since the information is not always the same, the Urner-Barry quotation differed from Exchange trading prices for 20 to 33 percent of the time in the years 1962-'66. It ranged from 3 cents higher to 2½ cents lower than the high sale price on different days.

Criticism 4—"There is too much opportunity for undue manipulation in Exchange trading."

Fact: The membership of the Exchange is well balanced between buyers and sellers, and includes at least one strong, active producer cooperative. The Exchange trading rules must give equal protection to all and they are enforced. I know this from personal experience (P.S. I was the accuser, not the accused).

In addition, the presence of an official representative of the Federal Commodity Authority at every trading session is further insurance against fraud.

I won't say that temporary manipulation **never** occurs. A group of producers succeeded in bidding prices up in the summer of 1968 faster than the supply-demand situation warranted. A severe price drop immediately followed their buying activities. Many neutral observers believe that it was a direct reaction to this artificial trading. Let's say, then, that short-term manipulation is possible, but is invariably offset by a contrary reaction rather quickly.

Progress

I have said earlier that the job of adjusting the 1872 egg-pricing system to 1969 conditions must start with a clear picture of all the important things which affect prices.

I am happy to say that, at long last, a broad-enough investigation to include all the contributing factors was started nearly 10 years ago and is now about completed. The investigation is sponsored by the National Association of State Departments of Agriculture (NASDA). It is under the direction of Philip Alampi, New Jersey's Secretary of Agriculture . . . an able and dedicated individual.

It started slowly, outlining the areas to be investigated. Congress appropriated adequate funds for the job in 1965. The U.S. Department of Agriculture and 13 State Agricultural Colleges are conducting the study. Final reports on their findings will all be in this year, Secretary Alampi reports . . . this is progress.

(Continued on page 8)

*Dr. Huttar was associated with the egg industry for 40 years before his recent retirement . . . as egg producer, college poultry specialist, and manager of Agway's Egg Marketing Department.

We made it tougher for everybody.

We built it tougher for people who have a lot of slam-bang work to do. And for campers who prefer bumpy back roads, or no roads, to superhighways. (And, we admit, to make our competition wish they'd built a better truck.)

Where the roughest loads pound against the inside of the pickup box, we put double walls of steel. Where road splash could cause rust, we put fender liners and undercoating. Where ruts and rocks jolt the chassis, we put a heavy-gauge truck frame and an extra-rugged suspension system.

We got hard-nosed about quality when we made this Chevy pickup. Gave it a cab interior with car-like comfort and style plus truck durability. Provided the biggest choice of 6 and V8 power in any popular pickup. And much more. We got tough with this one —and so can you. See your Chevrolet dealer. . . . Chevrolet Division of General Motors, Detroit, Mich.

CHEVROLET

More trucks are Chevrolets because Chevrolet is more truck!

Eggs . . . . .

(Continued from page 6)

Another encouraging development is the recent organization of a producer-oriented group called United Egg Producers (U.E.P.). UEP was spearheaded by 3 existing regional organizations . . . the National Egg Co. (NEC) in the Southeast; the Southwestern Egg Producers (SWEP) and the New England Marketing Association (NEMA).

Many other egg marketing cooperatives and individuals, as well as large individual egg producers, have joined UEP. Its primary objective is to increase the bargaining power of egg producers in the marketplace. From what I have learned of the organization so far, I am encouraged by the fact that it intends to work at these two important facets of the problems of egg price determination and stability:

1. Increase the coverage and improve the accuracy of those vital statistics on production changes, existing inventories and movement of supplies to various markets.

2. Influence production plans and trends to the end of avoiding ruinous oversupplies.

If they are successful . . . and I hope they will be . . . this is another step in the right direction.

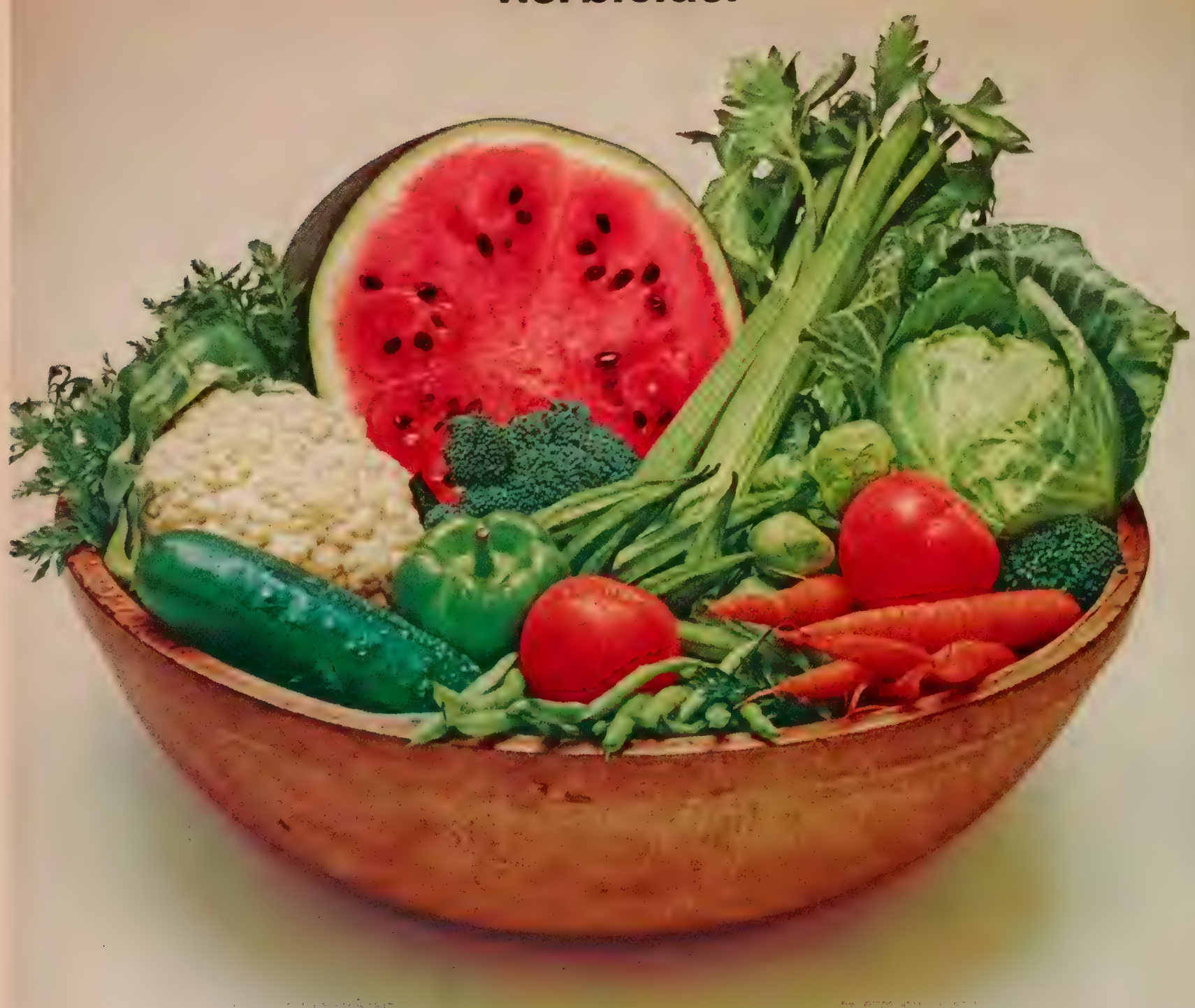
What I feared during the last low-price period was that the severe pain it caused among egg producers might bring forth hasty action without full knowledge of the problem. The present period of favorable prices has taken some of the pressure off, and a little time is thus provided for all to get better informed.

Many industry people fear that these same favorable prices are building us up to another sad period of overproduction. I hope not; this would again build the pressure from the extremists, whose solution to the problem seems to be, "Let's liquidate the N.Y. Mercantile Exchange and Urner-Barry." Watch out for the fire when you jump out of the frying pan!

We should learn something from NASDA's investigation, and we ought to give UEP a chance to gain a little experience and strength.

I agree with the statement Phil Alampi made in a speech at NEPPCO's producer meeting last fall. He said, referring to the NASDA study, "A better egg-pricing system should come out of these studies. Maybe it will be a modification of the present system. Maybe it will be an entirely new approach. I feel that, unless we have a better plan, let's stick with what we have even though we aren't completely satisfied."

Treflan®.
The mixed vegetable herbicide.



Treflan helps cut the time you spend battling weeds and grasses in over 20 different vegetable crops. You can save as much as 40 hours of hand hoeing and machine cultivation per acre with Treflan weed control. At $1.50 per acre, that alone could mean a saving of $60. Then, there are the better yields that usually follow reduced weed competition.

It all helps add up to better net profits for vegetable growers through more efficient weed control.

Treflan gets the worst types of weeds and grasses —all 27 of 'em—as they germinate. Before they can get above ground and start taking moisture, sunlight and nutrients from your vegetables.

Once Treflan is incorporated into the soil (preplant or postplant), it's there to stay as long as it's needed. Treflan works equally effectively in wet soil or dry. It's a natural for irrigated vegetables because it doesn't wash out, even in repeated irrigations.

You can shallow cultivate, if need be, to break the soil's crust or control resistant weeds without hurting Treflan's weed-killing effectiveness.

Treflan can now be applied by air. Incorporation can now be delayed up to 4 hours after application. For some vegetables, you can apply Treflan weeks before planting to spread out your workload. See your Treflan dealer about the proper time of application —preplant or postplant. It varies according to crop.

Treflan® ELANCO

ELANCO PRODUCTS COMPANY • A Division of Eli Lilly and Company • Indianapolis, U.S.A.

So dependable, it's guaranteed.

(Treflan®—trifluralin, Elanco)

AN OFF-COLOR YOLK

Research workers at Washington State University have conducted a study of a flock laying eggs with a predominence of of light-pigmented ("platinum") yolks. They determined that the flock was not infected with capillaria worms, and that the laying ration contained normal quantities of vitamin A and carotenoid pigments.

They concluded that the platinum yolk condition spread through a series of pens as if it was caused by an infection. The workers were able to spread the condition to other isolated birds, by including fecal matter from infected birds in their diet. The feeding of **sterilized** fecal matter, though, could not be used as a mode of transmission . . . indicating some sort of infective agent.

They found that the incidence of platinum yolks could be eliminated by the feeding of 200 grams of aureomycin or 100 grams of furazolidone per ton of feed. These two substances are not normally effective against a virus infection.

It was determined that the blood of the birds laying eggs with platinum yolks contained approximately one-third the normal concentration of pigment. It is not known whether the causative agent was destroying the pigment, or simply preventing its absorption.

Here are suggestions by Forest Muir, Maine poultry specialist:

If **all** yolks are light in color:

—check feed for a lack of color-producing pigment.

—check the age of the corn; it will influence the yolk-pigment-producing ability of the feed.

If light-colored yolks are **intermingled** among a predominance of normally pigmented yolks:

—check flock for capillaria worm infestation.

—check vitamin A level of the feed.

—Feed 200 grams of aureomycin or 100 grams of furazolidone per ton of feed.

VEGETABLES

Baker—Russet Burbank is a potato variety widely known for its excellent baking quality. Plant breeders Plaisted and Peterson at Cornell University released fairly recently Bake-King . . . a variety that rivals or exceeds "R.B.'s" quality. Besides, Bake King can boast a high level of tuber uniformity . . . something that Russet Burbank notably lacks.

For more information on Bake-King, contact Professor Robert Plaisted, 252 Emerson Hall, Cornell University, Ithaca, New York 14850.

Biological Machines—Tiny biological machines called peroxisomes have been discovered in plant leaves by Michigan State University biochemists. It is thought that by controlling the numbers of peroxisomes, plants may some day be grown more efficiently . . . and perhaps in areas where they don't grow well now . . . such as regions with short growing seasons or low levels of sun exposure.

Culls Defined — New York State now has official standards for grading, packing, and classifying lettuce, and has come up with a cull definition for Iceberg-type lettuce. Beginning January 1, 1969, "cull" Iceberg-type lettuce, regardless of place of origin, when sold, exposed, or transported for sale, must be plainly marked culls.

The standards are practically identical to those established previously by the USDA, and their use is voluntary on the part of growers and shippers. However, the cull provision is mandatory, and will be enforced by regulatory inspectors.

Gourds — There's a lot of interest in growing gourds. They make attractive vines when in flower, and produce fruits of many shapes and color combinations . . . fine for table decorations or for gifts for friends. There are all sorts of publications about gourds, too. For further information, write to The Gourd Society of America, Inc., Elmwood, Massachusetts 12337.

New Tomato—Introduction of a hybrid tomato that is extremely resistant to two garden enemies . . . verticillium and fusarium wilts . . . has been announced by Burpee Seeds. Seeds are offered gardeners and growers through the firm's 1969 catalogs.

The hybrid, named Burpee's VF Tomato, is the result of 15 years of research that began with recognition of the increasing need for wilt-resistant tomatoes. Both verticillium and fusarium wilt resistance were found in primitive types of tomatoes from Peru, believed to be the point of origin of tomatoes. In addition to wilt resistance, this new variety is reported to offer the other hybrid advantages of vitality, productivity, earliness, quality, uniformity, and adaptability.

New Storage — Charles Breslawski of Hamlin, Monroe County, New York, has a new 60×100 cabbage storage ready for his '68 crop. The clear span interior has 16′ ceilings with glass bat insulation stapled between the 2×6 studs on the back wall. Polyethelene film, 6 mil thick, is stapled on next for a vapor barrier (on ceiling rafter ties also), and then a 2-inch-thick tongue and grooved polystyrene insulation board. If refrigeration is added later, more ceiling insulation may be added.

NEW GROWTH MEDIUM

BR-8 soil blocks, a new plant growth medium, are made in a convenient, easy-to-use form, impregnated with sufficient nutrients to give seeds a good start. Roots grow right through the block, permitting direct outdoor transplanting from the bench; no potting is required.

Br-8 already contains limestone, trace elements, and minerals, and enough nitrogen, phosphorus and potassium to support tomato and pepper plant growth, for example, for about two weeks without adding more nutrients. The blocks absorb large amounts of water quickly, and have a high water-holding capacity.

The blocks are made by the American Can Company from modified cellulose fibers and wood pulp. For further information, write direct to American Can Company, Horticultural Products, 708 Third Avenue, New York, N.Y. 10017.

Judge Trimble sure must be well thought of. He had lipstick on his collar yesterday and not one person started a rumor.
— Gilcrafter

"DEKALB Sudax Brand really makes milk and sure saves on hay."

Dairyman finds Sudax Brand hybrids boost summer milk production.

Richard W. Gladfelter, Littletown, Pa., feels DeKalb Sudax Brand could be the greatest summer milk producer—ever. It's the forage crop that keeps milk production high during the hot summer months.

"We have about 40 acres of DeKalb Sudax Brand SX-11, SX-5, and SX-12, and I like them all equally. I have about 100 milking cows. We green chop morning and night. Sudax Brand really makes the cows milk. When it's wet and I can't chop, I can see a big difference. Sudax Brand really makes milk and sure saves on hay. It really grows!"

Sudax Brand can help you make *more* pounds of milk at lower feed cost. A University test shows it's superior to alfalfa for palatability and digestibility. Sudax Brand resists drouth, insects, disease, and it grows and re-grows like nothing you've ever seen. It's also one of the world's most versatile forage hybrids. You can use it for green chop, pasture, hay, haylage, cover crop or plow-down. It's a money-maker, many ways.

Your DeKalb dealer has Sudax Brand varieties bred for your climate and conditions. See him today.

DEKALB SUDAX BRAND

"DEKALB" and "SUDAX" are registered brand names. Numbers designate varieties.

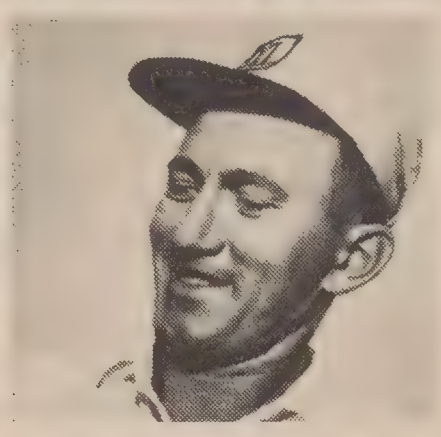
Dairymen agree Sudax Brand helps pour-out the milk.

"We really like Sudax Brand: all farmers should use it for better milk checks."

Anthony Walter, Loyal, Wisc.

"We've found Sudax Brand increases milk production. It has been planted on our farm since it was first introduced."

Edward Moseley, White Plains, Va.



"We have been green chopping for the last 10 years and nothing compares to DeKalb Sudax Brand."

Robert Holloway, Sparta, Ill.

"I just don't know of anything to equal DeKalb Sudax Brand SX-12 for haylage, green chop, hay and pasture.

Thomas Jones, Fredonia, Ky.

Ask for Sudax Brand by name. It belongs on your farm.

5-plow 830

8-10 plow 1470

A Case man gets more done with high-torque muscle... in any power size!

Big-bore, long-stroke engine design. Big leverage, high-torque power. That's what makes every Case tractor a big producer. 3-plow 430 to giant all-new, 8-10 plow 1470—every-size CASE is high-torque design. *Built to develop maximum power leverage* . . . a deep power reserve that responds instantly to overloads, barrels you right through tough going.

Lower rpm—bigger engine. You'll find your Case will do the job with less strain and fuss. Engines turn out their full-rated power at easy-going speeds—hundreds of rpm less than competition. Engine displacements are bigger . . . from 188 cu. in. in the 3-plow 430 to the giant 504 cu. in. turbo-charged 1470. Your Case tractor doesn't have to work its heart out to handle the job! Result: longer life and minimum maintenance.

Step up your work pace. With a CASE you can often use bigger, time-saving implements—or work a gear higher than usual. Ask your Case dealer for a proof demonstration . . . and have him figure *your* kind of deal. Convenient Lease or Crop-Way Purchase Plans. J. I. Case Company, Racine, Wis.

See your CASE® dealer now for the best deal you've seen in many a year!

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PASSUMPSIC
McLaren's, Inc.
WEST CHARLESTON
Charleston Garage

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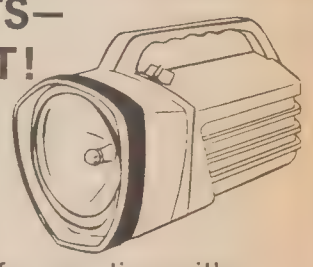

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Personal Farm Experience

PROTECTS PIPELINE

After the whitewash truck has finished its job of prettying up the dairy stable, some dairymen learn a hard lesson about around-the-barn pipeline fittings. Whitewash can foul up electrical connections . . . or any other type of connection.

Stanley Wheelock of Ilion, New York, says that a simple way to handle the problem is to use plastic sandwich bags . . . held on by rubber bands . . . over fittings. And he wipes off the 540 feet of pipeline with a cloth before whitewash sets up.

He reports that it took a while after the pipeline was installed before the cleaning combination worked out just right . . . a matter of fitting the cleaning agent to the mineral mix in the water, and also getting water temperatures high enough. This will vary from farm to farm, of course.

On this farm, there is an unusually well-built separate barn (built in 1967) for young cattle and a few dry cows . . . located adjacent to the 78-stall main barn. The heifer barn has two calf pens, 23 stalls for young cattle, and 12 stalls for cows. Calves are moved to this barn when a week old.

Young cattle run in a small pasture beside the barn in the summertime, but are hand-fed grain twice a day, and have hay available free-choice. When they're a year old, they begin getting some silage.

The herd average most recently is 16,065 pounds of milk . . . with one 14-year-old turning out 26,400 pounds in 306 days! As could be expected, ketosis has been a problem; lead feeding . . . cows getting up to 5 pounds of grain a day at freshening time . . . hasn't seemed to help the problem. — *G.L.C.*

COMPARES SYSTEMS

In Pittsfield, Maine, George Newhouse operates an 80,000-bird table egg farm. His earlier buildings are of the huge multi-deck type; later buildings are of the one-story, windowless, controlled-environmenttype.

George Newhouse

Newhouse compares two systems of layer management on his farm: (1) a semi-automatic floor operation; (b) converted buildings using a flat deck cage system. He has no real conclusions as to the more profitable egg production between the two systems.

Personally he feels that when it comes to production, cost, labor and housing he would consider a 9000 square feet building (36×250). He points out that capacity for floor birds would be 5000 birds . . . 8200 in cages. Basing a floor operation on 19 dozen eggs per bird housed, his overhead and labor depreciation is 3.9 cents per dozen. In a cage operation his overhead and labor costs come to 2.48 cents per dozen.

"If you expect five percent less production in cages," he says, "the overhead and labor plus depreciation amounts to 3.3 cents per dozen."

In his farm tests he compared the flat deck 18×24-inch six bird cage and the 16×18-inch four bird cage. The four-bird cage won his approval; bird inspection is much easier, and it's easier to handle. — *C. L. Stratton.*

Ralph Jensen stands in his field of healthy-weed-free corn.

NO EXPANSION

"We have no quarrel with those who expand the size of the farm," says Ralph Jensen of Seneca Castle, New York, "but we have no plans to get bigger.

"My two brothers (Robert and Glenn) and I have a family partnership. The three of us run this 300-acre cash crop and dairy farm, with 28 milkers and 24 head of young stock. The herd average is right around 17,000 lbs. of milk.

"Glenn runs a nearby farm with a herd of 25 Angus cows. Calves are sold mostly as feeders. However, the three of us work together as a team.

"Cash crops include 70 acres of beets for canning, and 80 to 100 acres of corn, part being fed and some sold.

"For feeding the herd," continued Ralph, "we grind corn on the cob and add oats, (which we usually buy) plus distillers grains, a 32 percent protein concentrate, and molasses."

At this point I asked, "What does it take these days to get a 17,000 lbs. herd average?"

"Breeding is important," was the reply, "and give artificial breeding most of the credit for the rapid improvement. Then comes feeding. Dairymen took a big step ahead when they began to feed as heavily in summer as in winter.

"Also, the hay we feed is much better than it used to be, partly because of early cutting. Our herd is in stanchions. I agree that more milk per man can be produced in a free stall barn, but we feel that the advantage is not big enough to justify a change when we have a good farm.

"So far as size is concerned, a big problem is help. I feel that the man who has always worked or managed a big farm gets along with help better than the man who suddenly expands. We hire very little help. Another big problem is management. The bigger the farm, the more important is good management."

Incidentally, I am always bothered when a farmstead is "sloppy," especially when I know the owner is making money. It seems to me that Ontario County farms are neater than average . . . and the Jensen farmstead is unusually attractive. — *Hugh Cosline.*

HEAVY ON CORN

The Nedrow brothers (Jon and Bill) of Ludlowville, New York, have 100 cows in their herd . . . feed them mostly corn silage for roughage, and high-moisture corn-and-cob meal for grain. They fill three cement-stave upright silos (20×50, 14×60, 14×40) with silage, as well as a trench measuring 30×70×10 feet. Another upright 14×50 is filled with the high-moisture ear corn.

The Nedrow herd has been on a high-silage ration for a number of years, with no more than ten pounds of hay per day per cow. In 1968, the hay ration was cut to a maximum of two pounds per cow per day. Silage is fed three times a day in a bunk.

The entire herd gets five pounds per cow of high-moisture corn in the bunk at night feeding, plus five pounds per cow of a 28-percent protein supplement. Urea has been added to the HM corn at the rate of 10 pounds per ton, and there is some urea in the 28-percent supplement, but none in the corn silage.

The herd is split into two groups by level of daily milk production (less than 40 pounds, and 40 pounds or over). At the morning feeding, the "40-and-up" group gets an additional 15 pounds of HM corn per cow . . . making a total of 20 pounds per cow per day. Grain feeding (a high-fiber 16-percent protein ration) in the double-3 herringbone milking parlor is also correlated with milk production . . . up to a maximum of 12 to 14 pounds per cow.

Jon reports, "After switching to the higher levels of corn silage, the herd exhibited all the symptoms of protein shortage . . . breeding problems, 'sour' manure, and production dropped. At one time during the six months that it took to get on top of the problem, we experimented by putting soybean oil meal on the silage . . . and got an immediate response in added milk flow." Since the problem was cleared up with adequate protein, milk production is back to normal.

The Nedrows aren't discouraged with feeding mostly corn silage for roughage, but Jon comments that they are "thoroughly discouraged with hay". . .because of the chronic shortage of good weather and hired labor at haying time. They even plan to buy some or all of the hay they need in the future.

To provide the feed needed, the Nedrows grew 200 acres of corn in 1968, harvested that going for silage with a two-row PTO chopper. The rest of the 300 acres of tillable land grew oats, wheat, and 45 acres of hay.

Because corn has been grown in some fields year after year, a buildup of corn rootworms has developed. Jon reports spraying a couple of fields with Diazinon in '68 . . . and he plans to use a soil insecticide on all corn acreage in '69. He's well acquainted with the "goosenecking" symptom of a corn stalk afflicted with rootworms. — *G.L.C.*

FLOWERS, BEES, HONEY

"I have always kept bees, but I recently sold my pollination business," said Harold Merrell of Wolcott, New York. "My brother and I started with bees in 1912, and I bought his interest in 1920. For years I owned from 3000 to 5000 colonies."

In 1928, Mr. Merrell began renting bees to apple growers, and put bees for pollinating apples and other fruits in the orchards of about 150 growers from Wayne County to Onondaga County.

"In the old days when apple trees were sprayed with lead arsenate we lost a lot of bees. Then new sprays were developed that were not so toxic to bees. Recently a spray material called Sevin has become widely used, and it has destroyed many colonies of bees.

"While we were renting bees," continued Mr. Merrell, "we depended about equally on rent money and honey for our income. The honey was extracted and sold in 55-gallon drums through a cooperative.

"There have been some efficiencies developed in bee-keeping," continued Mr. Merrill, "but there is still a lot of hand work for the beekeeper. Years ago we were told that a man could care for 500 colonies. Now he can look after 1000 to 1500. Even so, a man must watch costs carefully if he expects to make a living. There is some doubt that it can be done solely by the sale of honey, except in the better honey-producing areas.

Some colonies are lost every year, probably at least 10 percent. We always replace them by putting new queens in colonies where the queen has died, or by dividing very strong colonies."

In addition to his bees, Mr. Merrell had a dairy. At present he is semi-retired, and his son Harold H. (Pete) runs the 500-acre farm with around 200 head of livestock.

"As I sell the bees," said Mr. Merrell in parting, "I have to sell to several men. I couldn't find anyone willing to buy all of them!" — *H. L. C.*

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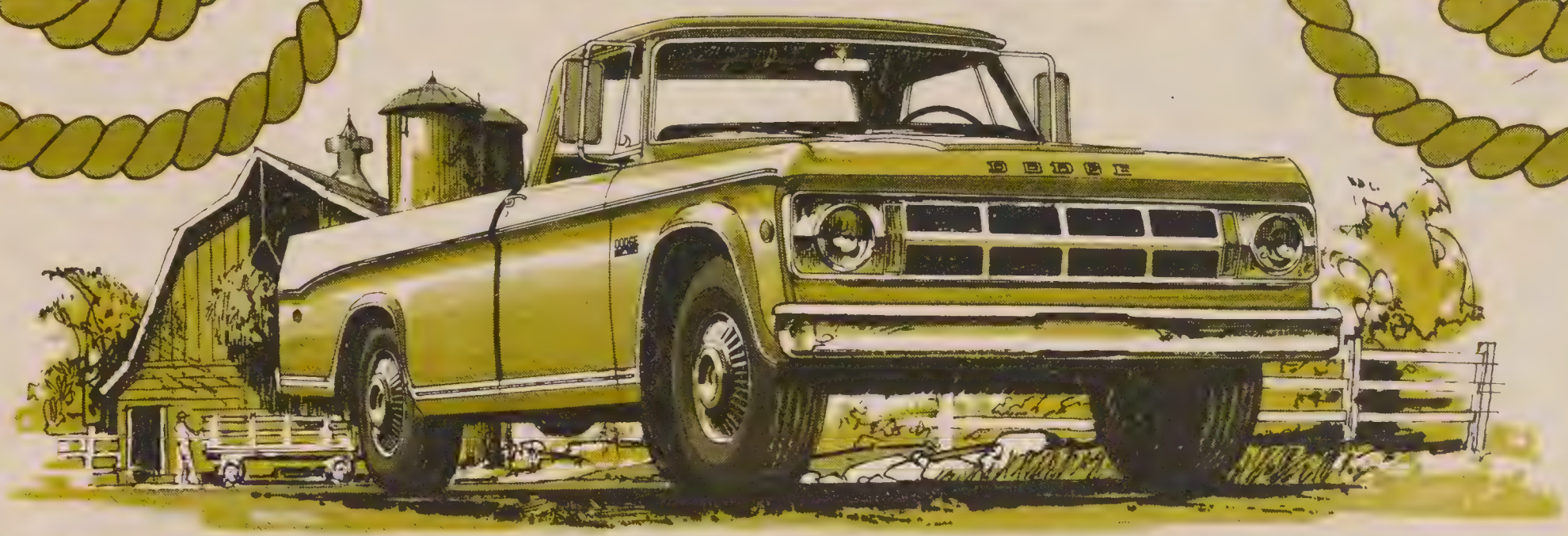

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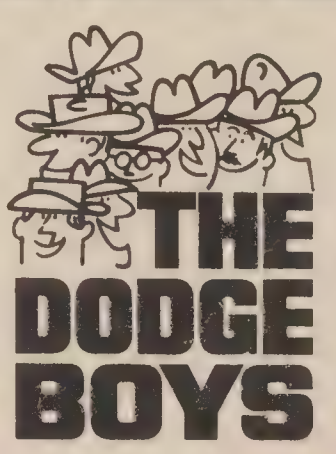

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DON'T NURSE A SEEDING!

PART ONE

by John E. Baylor*

SOME 20 years ago in early July, Fred Lorenzo and I visited Gil Hartung's farm located near Belvidere, New Jersey. At the time I was Extension crops specialist in New Jersey, and Fred was county agent of Warren County. Gil was a prominent dairyman in the county . . . an excellent crops farmer, known as an innovator.

Fred took me to Gil's farm to look at an excellent new stand of alfalfa, seeded that spring on a prepared seedbed **without** a companion crop. Fortunately, weeds were no problem. At the time of our visit, Gil was about to make the first cutting of hay from the field.

I don't recall how much hay per acre this field actually produced. But the stand was excellent, and it remained productive for several years.

I do recall, however, that Fred and I also visited other new alfalfa seedings in the area. Established in oats, those stands were generally only fair and the individual plants small. No hay was harvested that year from any of those fields.

Today's Situation

That was nearly 20 years ago, but even today many farmers in the Northeast are satisfied with just mediocre forage stands. They aren't convinced that poor stands are unprofitable. And while seeding alfalfa in the spring without a companion crop is much more common, establishing legumes and grasses in oats is still the rule.

Let's review briefly some of the principles of seedling establishment . . . to see why Gil Hartung's alfalfa was so outstanding. And we'll look at some other ideas on forage establishment, especially with legumes, that can help you to higher forage profits in the years ahead.

Successful establishment of small-seeded forage crops starts with the selection of high quality seed of adapted species and varieties. It also includes proper seedbed preparation, the use of sufficient lime and fertilizer, choice of favorable seeding dates, and sound seeding techniques. And it involves the use of management practices to keep those seedlings . . . at least one-half million plants per acre . . . healthy and vigorous.

The actual number of seedlings per acre varies, of course, with the species. For some grasses such as timothy, it's considerably higher . . . and fewer for those that spread by either rhizomes or stolons.

But regardless, when compared with larger-seeded species, the seeds of many perennial forages are extremely small and contain very little stored food material. This makes seed placement . . . in fact, the whole seeding procedure . . . critical with these species.

In fact, several studies have shown that frequently, even under favorable conditions, less than one-third of the germinated seedlings of many species actually survive to produce mature plants.

Match Crop To Soil

Soils in the Northeast vary widely in acidity, fertility, topography and drainage. And individual fields frequently contain not just one, but several, soil types.

You know that some crops will do better on certain soils than on others. Therefore, try to fit the crop to the soil. And on your best soils grow that forage crop or crops that will produce the most feed per acre for you.

For example, birdsfoot trefoil does well on a well-drained soil. However, except on steep slopes or stony fields where very long-lived stands are desired, alfalfa is a better choice.

On the other hand, there are many soils in the Northeast where alfalfa is not adapted. Choosing other species for these sites will be more profitable.

Quality in seed can be related to the **germination** and **purity** of a given seedlot or to the **vitality** of the individual seed . . . that is, its capacity to get off to a fast start once other conditions are met. Contributing to the vitality of a seed are such things as its age, maturity, and condition under which it is stored.

As I remember, for his seeding Gil Hartung used certified seed of a recommended alfalfa variety known to be well-adapted to his farm.

In legumes, especially birdsfoot trefoil and crownvetch, the percentage of hard seeds is also often associated with seed quality. Hard seeds may be more beneficial than detrimental since a high percentage of hard seeds will usually germinate anywhere from several months to several years after seeding. However, if the hard seed content is excessive, some adjustment in seeding rate should usually be made.

Seeding Rates

Seeding rates are related to many things . . . including, among others: seed size, germination, establishment capacity and spreading characteristics of the species, and conditions under which the seedings are made. The table on this page will give you some idea of the variation in seed size of some of the common forage species.

VARIABILITY IN FORAGE SEED SIZE

Crop	Approximate Seeds/Pound	Seeds/Square Ft. at Seeding Rate per Acre of			
		1 lb.	5 lb.	10 lb.	20 lb.
Alfalfa	221,000	5	26	51	102
Birdsfoot Trefoil	414,000	10	48	95	190
Bromegrass	137,000	3	16	31	62
Red Clover	293,000	7	34	67	135
Orchardgrass	468,000	11	54	107	215
Timothy	1,260,000	29	145	289	578

As a rule, most seeding rates are designed to provide three to eight times as much seed as would be needed under ideal conditions. And, as will be shown later, higher seeding rates than those normally recommended, especially with alfalfa, may be desirable to get highest yields the year of seeding.

In general, for grasses, the smaller and lighter the seed the more feeble is the establishment. For example, bluegrass and redtop have an establishment capacity of only 20-25 percent, timothy 40-45 percent, and orchardgrass about 60-70 percent. Thus, correspondingly more seeds per unit area must be used with the smaller-seeded species.

When should you seed a given crop? Here, again, it depends . . . on the seedling vigor and winter hardiness of the species, and climatic conditions.

Seeding in late summer, for example, usually provides a favorable period of stand establishment because of cool nights, adequate moisture, and warm soil. Grasses sown in late summer or early fall root more deeply because the slower topgrowth is conducive to better root formation.

On the other hand, some grass species (such as orchardgrass) are relatively non-hardy in the seedling stage, while others (such as bromegrass and reed canarygrass) lack seedling vigor. These species, therefore, must be sown relatively early in August, or even in late July, to assure good winter survival.

Sring seeding on a prepared seedbed is becoming more popular in many areas, especially with alfalfa. These should normally be made as early as the seedbed can be prepared. Late spring and early summer is usually more hazardous . . . higher temperature, less moisture, and more insect damage.

Seeding early on a well-prepared, firm seedbed without a companion crop, as done by Gil Hartung, eliminates the major hazards for making seedings at this time of year.

Some people may tell you that inoculating legumes is old-fashioned . . . but don't believe them! There are many good reasons why it's still desirable to thoroughly inoculate legume seed with the proper bacteria every time a new seeding is made, regardless of the previous crop grown. For example, the soil may not contain the correct bacteria strain. Furthermore, many of the legume bacteria naturally present in the cultivated soil are not high-nitrogen-fixing strains.

Much of the alfalfa and clover seed currently marketed is pre-inoculated, using one of several commercial methods, with the proper bacteria strain prior to sale. It is generally agreed that alfalfas and clovers can be effectively pre-inoculated . . . **if** the seed is properly stored following treatment, and is sown within 3 to 4 months after inoculation. Pre-inoculated seed sown in late spring or carried over for summer seeding should be re-inoculated prior to seeding.

So far I've said nothing about soil fertility and successful establishment.

While some crop species are more tolerant of soil acidity than

(Continued on page 25)

*Extension Agronomist, Penn State University.

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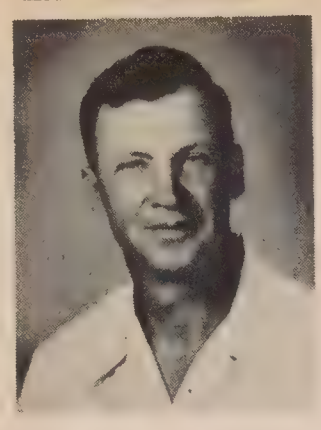

Gayway Farm Notes

by HAROLD HAWLEY

SIGNS OF THE TIMES

With taxes having become such a large item we can now pay them in split payments! Guess it's pretty old-fashioned, but we liked it better when they were small enough that they weren't too bad even in a lump sum. Some of us old conservatists keep insisting that we are getting more from our government than we can afford! Most of the things we get aren't bad in themselves, but it's just possible we maybe don't have to have everything all at once. Sometimes here at home we decide we have to wait for a few things. To suggest that our affluent society can't afford everything all at once is worse than being against motherhood!

Possibly we could stand a little less urgency to be first in welfare hand-outs, first in every conceivable educational innovation, first in government participation in every facet of what should be private business, first in wages, salaries, and fringes for all public employees.

ANOTHER YEAR — ANOTHER PLAN

It must be a sign of the times we live in but we seem never to be able to settle on a plan good enough to last two years. Each year we have a little different combination of practices. Hopefully, we will have a better package than before. The constant changing is a reflection of "something new," and also a dissatisfaction with some part of last year's practices. Maybe that's what makes this business of farming so challenging. We never have all the answers, but we can keep trying to improve.

We have been quite satisfied with the results obtained from broadcasting most of our fertilizer and plowing it down for the corn crop. The biggest drawback continues to be the difficulty of getting it spread by truck early enough. We can plow through a wet spot long before it is safe to let a truck try it.

This has meant that we have spread the fertilizer from a tractor-drawn rig which was loaded from a truck at the road. The only problem is that when we can be plowing we should be doing just that rather than spreading fertilizer. However, we will continue this plow-down practice as we like the idea of getting the plant food down where the moisture is and to make the roots go down to feed.

One feature of our fertility program isn't satisfactory. We have heifers to run in last year's stalk fields right up until we plow. It is by then too late to spread the field with manure. This means that each year we have 50 to 75 acres of ground that we would like to spread but don't. All we can do is to step up the commercial fertilizer a little.

Nitrogen

Now for this year the suggestion is being made that we spray on nitrogen with atrazine mixed with it as we disc. The theory is that the liquid nitrogen may be a little cheaper. Also if the herbicide can be applied at the same time and disced into the ground, one trip over the ground may be eliminated.

After some discussion pro and con, Bruce and I have about decided not to go for this procedure. Our reasons are several. We would still want to apply the rest of the fertilizer as plowdown. If we decide to spray before planting we think we will do enough better job if we just spray and concentrate on that operation. We normally pick stones as we disc, and a start-and-stop operation and a good spraying job don't go together. The other factor is that with a 20-foot disc Bruce can just nicely keep ahead of the corn planter.

Then, too, some custom sprayers have indicated that they had real trouble keeping atrazine in solution with the nitrogen. We have trouble enough keeping it suspended well in a water solution to get it on evenly. We'll watch this new practice carefully this year but do not feel we should make the switch yet.

Our real problem is to get our corn acreage planted in a shorter period of time. It normally takes about ten planting days or well over two weeks, with allowance for weather and Sunday. This is too long.

Remedies:

1. *Faster ground speed.* This we rule out. Even with our new planter our roadside tests suggest that excessive speed and proper drop are not compatible. We certainly don't want to risk a poor stand just to save a day or two of planting time.

2. *Put on extra help and plant more hours per day.* This we have tried with pretty spotty success. If conditions are good so that a part-time man can run the disc during chores, we can gain a little. Attempts at this in the past have not been too hot. Getting a rig stuck or breaking it, or failure to pick stones or not running over a lumpy clay knoll a little extra if necessary, etc., etc. are problems. All these things make this a doubtful approach, but we'll probably try again anyway.

3. *Larger equipment.* This is a possibility, but we seriously question how much extra money one can invest in larger equipment just to save 3 or 4 days planting time. To go from a 20-foot disc and 6 or 8 row-equipment would involve another $3000 or $4000. On 300 acres of corn this obviously means another $10 to $12 an acre. We question whether the extra investment would make us that much more money.

Practices to continue:

1. We think that changing our planter shoes halfway through the planting has worked well. We start out with shoes that are worn down part way from the last half of the preceding year. Most years the early-planted corn goes into moist ground and, of course, we don't want to plant as deep as we would later. The worn shoes do very well. Later, as the ground dries out, we will put on the other set of shoes (built back to the same dimensions as new ones). These shoes will allow us to plant a little deeper. We want to get down to moisture with the seed but not much beyond this.

2. We will continue to keep the seed and fertilizer well away from each other. Last year was the first year that we have had absolutely no indication of any fertilizer burn even on sidehills. Always before there had been some places where the seed and fertilizer got too close together, resulting in poor stand. Of course, as we have been putting on less plant food with the planter and more beforehand, this problem has become less acute. The big difference, however, has been due to getting the seed and fertilizer runs set even farther apart than previously . . . a good big three inches.

3. Pre-merge spraying will be continued wherever possible. Physical and chemical injury to the corn is naturally eliminated in this way. Even where the spray rig runs on the rows very little stand is lost.

It's time to go to a combination of herbicides on some of our fields. We have concentrated on nutgrass and quackgrass control with atrazine. A few species of weeds not controlled by atrazine are now getting to the point where we will have to add something to the atrazine solution specifically for these weeds. We aren't happy with some of the recommendations we've seen and heard which push this or that additive as a cure-all. If additional money is to be spent for weed control, we feel it should be for a specific chemical known to be effective against the special weed problem in an individual field. None of this over-all additive for all the acreage at an extra $2 to $5 an acre cost.

We might say that it is in a situation like this that we feel the Extension Service really earns its spurs. Based on research results they will give a grower the facts which will enable him to spend his money wisely on a selective basis. Some salesmen seem to be enthusiastic about selling more herbicides for all fields.

4. In all this maze of technology to grow a better crop of corn we do not intend to neglect one little old-fashioned ritual which hasn't changed since we started putting seeds into the ground. We like to add a prayer to Him who sends the rain and the sun, that our efforts may be blessed and our harvests bountiful.

BIG RIGS

"Size talk" usually centers around horse-power or width of cut, etc. In the last year or two, however, several buyers of corn who come into our area have shown up with tractor-trailer rigs with built-up sides which can really move away with a load. It's sometimes a little rough to get them in and out of farmsteads with snow, ice, or mud to contend with. Just as with other large machines, the size gives them a lower-per-ton hauling cost. The only drawback is when a rig of that size shows up late in the afternoon for a load. Someone is bound to be a little late finishing chores that night!

We welcome the trend toward these big rigs as a means of lowering hauling costs, and thereby reducing the spread between selling price on producing farms and buying price on farms in corn deficit areas. Any reduction in this spread is good for both parties. The more this spread is reduced, the greater the incentive to move more and more corn-on-the-cob directly to the dairymen who feed it rather than to go through the all-too-costly commercial route of shelling, drying, storing, and retailing.

EVERYONE'S JOB

The California grape experience and the flurry of labor union activity in western New York this past fall should leave no doubt in anyone's mind that there will be a real move to organize farm workers into labor unions. If we sit around and let this happen we will largely deserve what we get. I'm sure there are many ways to combat this very real threat to our businesses, and I hope we will do a lot of sitting down to discuss these things and then DO SOMETHING ABOUT THEM.

Possibly our most important step is to make sure that our housing, working conditions, rates of pay, etc. are above reasonable reproach. When the union activity really begins, the issues will not be decided by economic factors or by logical persuasion of the workers; they will ultimately be decided by public opinion. Whether we like it or not, a lot of organizations will get into the act including the churches, newspaper people, social workers, and last but not least the buying public. One or a few bad situations is all that they would need to "justify" action against all growers by insist-

(Continued on page 24)

Only $3944*

buys the famous one-hand control MF 36 Swather/Hay Conditioner!

You'll find features on the MF 36 that you don't usually find on other swather-hay conditioners near this price. A new steering wheel that adds to MF's famous one-hand control of all machine motion: forward, reverse, turns. A new gas tank. And a big 53 hp engine that's liquid cooled (anti-freeze included) for quieter, vibration-free, dependable operation, longer life and no starting problems. (Compare this with less powerful air cooled engines that come in "bargain" swathers.)

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*Suggested retail list price, F.O.B. Detroit, Mich. or Buffalo, N.Y. Complete with 10½′ table, 5-bat pick-up reel, rubber friction canvas with molded rubber slats. Tires: 7.60 x 15 dual front wheels and 5.90 x 15 rear wheel. Includes MF 42 Hay Conditioner.

Massey-Ferguson The Challengers

Massey-Ferguson Inc., Des Moines, Iowa

Photo: Robert Lamb

The case of...

THE DISAPPEARING BUCKETS

by James M. Albright

ONE OF the oldest agricultural commodities is syrup and sugar from the sap of the maple tree. Until recently, this sap was collected and converted to syrup in much the same way it has been since 1900. Now, however, the common scene of large majestic maple trees ringed with buckets standing against the grey sky and snow of early spring is evolving into a new look.

The new scene still has the majestic maples, the grey sky and snow, but gone are the buckets. In their place are small plastic tubes normally $^5/_{16}$ of an inch in diameter or larger. The tubes lead away from each tree and join other plastic tubes, which in turn lead to a central storage tank or directly to the sugar house itself. The sap is carried through the tubes by gravity.

More Efficient

Introduction of plastic tubing has added little to the aesthetic value of a sugar bush, but its use has practically eliminated the hard, unattractive labor of collecting sap and has lowered the cost of syrup-making as much as 40 percent.

No longer is it necessary to construct expensive roadways through the woods to support heavy tanks of sap, and to open these roads after heavy snows. Tapping need not be delayed until the sap season has arrived. Large crews do not have to be hurriedly assembled to tap the trees and hang the buckets. Instead, the lightweight plastic tubing can be carried by hand through the woods when convenient.

Further, by using plastic tubing, maple sap does not remain stationary in buckets for long periods of time. This is important, since maple sap is highly perishable and its small sugar content is sufficient to make bacteria and yeasts a problem. In the past, if the sap were not collected frequently from the buckets it tended to deteriorate, and the syrup made from it was of poor quality. With plastic tubing, the sap is constantly flowing.

Also, the tubing is transparent . . . allowing sunlight to penetrate to the saps, killing off bacteria and yeast. Temperatures are usually cool enough so that the rate of germination of any micro-organisms in the tubing is slower than their death rate caused by the transmission of ultra-violet radiation of sunlight through the tubing.

Actually, early tubing had its problems. Often, cracks would develop in severe cold weather. Modern tubing, however, is made from polyvinyl, which remains flexible during cold weather and lasts for years.

Another problem encountered with early tubing was that it was installed with the assumption that sap issues from a maple tree under high pressure. It was anticipated that the trees would develop enough pressure to force the sap through the pipelines. It was quickly discovered, however, that the sap leaks from the tissues of the tree under a wide range of pressures, from very low (almost immeasurable) to as much as 40 pounds per square inch.

Normally, there is just enough pressure to push the sap out of the spile, but not enough to elevate it any amount or even push it downhill if there is any back pressure obstructions in the line.

Main causes of back pressure are:

1. Ice plugs of frozen sap.
2. Low places in the line where pockets of sap collect.
3. Gas (vapor) locks resulting from pockets of gas exuded from the tree along with the sap, or from air pockets that result from air that has leaked into the tubing around the different connections, especially at the spouts.

Ice plugs of frozen sap are generally not an important cause in stopping the flow of sap. Usually, by the time the air temperature has risen sufficiently to cause sap to flow from the tree, the tubing will have warmed sufficently to partly melt the ice and allow passage of the sap.

Care should be taken, however, to make sure that whenever snow falls after installation of the tubing, the tubing be lifted up onto the top of the snow. A blanket of snow may act like insulation, keeping frozen sap frozen in the line.

An innovation that has increased the rate of thawing is the new ribbed tubing. The ribs on the sides of the tubes bend more infrared (heat) rays from the sun into the tube, and this results in much faster thawing.

Low Places

In most sugar bushes, the grade is uneven . . . quite steep in some places, flat in others. Sap will gain speed coming down the steep slopes. When the sap reaches the flat area, it may be traveling fast enough for some of it to be forced out of gas vents in the tubing.

The best way to remedy this is to run the tubing down the slopes at an oblique (diagonal) angle. This will reduce the grade of the tubing, thus reducing the velocity of the sap in the tubing. At the same time, the grade of the tubing over the flat ground should be directed downward as much as possible.

Another solution would be to connect the $^5/_{16}$-inch lines with the main line (of larger diameter) at the foot of the steep slope and to start new $^5/_{16}$-inch lines on the flat area after this slope . . . or the $^5/_{16}$-inch lines can be run into an open container.

Vapor Locks

A tree produces almost as much gas as sap. The first tubing systems were all sealed (no vents), and the gas from the trees was confined inside the tubes. The only way it could escape was to go down the tube with the sap.

This gas, however . . . being lighter than air . . . wanted to go **up** the tube. Thus, it would tend to block or slow down the sap trying to go **down** the tube. If the tube was not run over flat ground, the gas collected at each high point of the tubing, causing a vapor pocket which would completely stop the flow of sap.

The best way to eliminate this problem is to place a vent as close to the tap hole as possible. A vent must be placed near every spile. If a vent is placed near only half the spiles, gas from the unvented spiles will still cause vapor lock, which in turn will cause sap to run out of the vents that have been inserted.

A complete tubing system will contain lateral lines, main lines, spouts (spiles), tees and connectors.

The **dropline** is normally a $^5/_{16}$-inch (I.D.) tube about three feet in length. However, if the sugar bush is on fairly-level land, the drop lines should be about six or seven feet in length at the starting point of the tubing line. This aids in the gravity flow of the sap. A **tee** lies on one end of the dropline so that it can be connected to a **lateral line.**

On the other end of the dropline is a **spout** or **spile** which has a **vent tube** attached. Vent tubes are U-shaped, $^5/_{16}$-inch tubes formed with a short piece of wire; they are from six to 12 inches long and are attached to the vent tubulation of the spout. The U-shape tends to keep the micro-organisms out.

The lateral lines to which the droplines are connected are also $^5/_{16}$-inch (I.D.) tubing. The lateral lines are laid on the ground, although they should connect with the droplines about 18 inches off the ground. The connecting tee should be vertical. If this is done, it means that the high spots of the lines will usually occur at each tree, and the gas which tends to collect at high spots can simply go up the dropline to a spile vent and can be immediately vented off.

Main Lines

Lateral lines converge and connect to **main lines.** Main lines should be laid in the most direct route to the storage tank, with low areas avoided as much as possible. The first portion of the main line should be ½-inch in size. The size of the main line should be increased as the quantity of sap flowing in it increases. For instance, where two or more ½-inch lines converge, they should be attached to ¾-inch or 1-inch main lines. These in turn should be attached to still larger main lines as the number of converging lines increases.

Care should be taken not to lay lines under evergreens because they throw dense shadows and may keep the lines from thawing.

It has been found that a $^5/_{16}$-inch tube will handle as many as 30 taps on high-producing roadside trees. This was on perfectly level ground, which would indicate that if there is any grade at all which would increase the velocity of the sap in the tube, a $^5/_{16}$-inch line may handle as many as 50 taps. However, a beginner should not have more than 25 taps on a $^5/_{16}$-inch line. A ½-inch line should handle the sap from 150 or more tapholes.

At any place in a tubing installation where two or more main lines come together, or even where several of the smaller lines

(Continued on page 24)

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DOC METTLER COMMENTS ON

LAMBING

The author is a practicing veterinarian at Copake Falls, New York

NO symbol of springs goes back as far as the newborn lamb. This has been part of mankind's history so long that it seems almost a human instinct to relate spring and the newborn lamb.

To the experienced shepherd the birth of a lamb is no great problem. True, it may be tedious spending the night in a lambing shed, but it is a routine he is used to, and he knows it will only last a short time.

However, here in the Northeast many flocks consist of only a few ewes and a single buck kept by people who have little or no experience to fall back on when lambing time comes. For these people I'd like to discuss lambing problems so they may help themselves on minor problems, and learn to know when they are in enough trouble to call a veterinarian for help.

The Economics

The economics of the sheep business are such that the average grade ewe is not worth the price of a veterinary call, and the owner must either help her himself, or in some cases put the ewe in the back of the station wagon and take her to the veterinarian.

Even if this economic factor didn't exist, the time element on a lambing case is so important that if you can provide help yourself a ewe may be delivered of a live lamb, whereas if you wait for help you might end up with a dead lamb.

Of course, since most people who have sheep like animals, the humane factor is involved. No one wants to see a poor ewe suffer; she must deliver herself, you must help her deliver, or you should call for help. Most ewes will lamb unassisted, usually, for some unknown reason during the hours of darkness . . . more specifically in the early morning hours.

Gestation Period

A ewe may start to have heats in July as soon as the days begin to get shorter. If a buck is with the ewes this early, ewes may lamb as soon as late December. The gestation period is from 140 to 160 days, averaging about 150 days. If you want lambs to sell as "Easter lambs" you will breed them early so as to have lambs eight to four weeks before Easter. If you use a breeding vest on your buck (a canvas vest on the buck on which is smeared colored material which rubs off on the ewe when he breeds her) you can tell almost to the day when each ewe is bred and keep a record of due dates. Even if you don't have a due date on each ewe, you can watch the udders of your ewes and tell when they are full of milk and guess they are close.

These pregnant ewes should be in a dry, roomy, well-ventilated and well-bedded area where they get lots of exercise and don't have to crowd to eat. Before the first ewe is due you should spend some time walking around in the pen so that they get used to you and won't jump up when you enter. A good old shepherd told me once that when you are walking in a sheep pen and come to a ewe lying down you should walk around her, not make her move for you.

Your lambing shed should be draft-free but not too warm or damp. It should have plenty of light for night use, since that is when you'll have most of your lambing. Warm water should be available and also a clean enamel or stainless steel pail, mild disinfectant, liquid soap, towels, an injectable antibiotic, and perhaps some hormone to contract the uterus after lambing difficulty.

The ewe that lambs normally will do it so quietly that you'll hardly know anything is happening. Watch for one off in the corner by herself that seems to be straining. Sometimes a ewe will labor a while and then get on her feet and just stand. Look at her closely . . . is there any discharge or anything showing from her vulva?

If she has bagged well and seems due, ease her into a corner, and if necessary tie her with a small halter. Wash her hind parts with warm water and a mild disinfectant. Scrub your hands and arms thoroughly, clean your nails, and after soaping one hand see if you can enter the vagina. On a big ewe the average-sized man can insert his hand easily.

"I was wasting too much labor carrying milk"

"My biggest decision came in 1963. My herd had grown from 40 to 100 cows. I figured I was wasting too much labor carrying milk . . . so I made the decision to buy a pipeline system and expand my herd still more," says Dr. Herbert R. "Doc" Marks, Lewis County, New York.

He had started in the dairy business in 1961 milking 40 mortgaged cows, using Surge Bucket Milkers in a stanchion barn. Eight years later he has built his herd to 420 cows and owns a Surge Pipeline Milking System and other automated equipment to raise production per man hour.

But his moment of decision came in 1963 when he faced the need for a pipeline milking system. As veterinarian for many dairymen in his county, he was able to compare different milking systems.

He chose a Surge Pipeline Milking System to cut labor and make full use of his stanchion barn. "I have nothing against a parlor system," says Dr. Marks, "but cost of a parlor was an important factor. I'm able to make use of my stanchion barn and milk 118 cows at one time with this system. And my men can give a little more personal attention to the cows."

One of the major causes of mastitis, says Dr. Marks, is improper milking. "We use Surge Breaker Cup Milking Units," says Dr. Marks, "and they are a big help in proper milking — they do a good job. With these, the men can see when a quarter is milked out and take the teat cup off to prevent over-milking and injury."

Dr. Marks believes so strongly in good milking technique that every three months he holds a milking school for his men. "I remind them how I want a cow milked," he says.

"Another big reason I selected a Surge System was good service. The Surge people did a fine job of installation and we get good service day or night," Dr. Marks adds.

Dairymen everywhere have learned to rely on their local Surge Dealer for top quality equipment and reliable service. Call your Surge Dealer today and discuss with him a labor-saving Surge System for your operation.

SURGE BABSON BROS. CO., OAK BROOK, ILLINOIS

BABSON BROS. CO., (Canada) LTD., PORT CREDIT, ONTARIO

On a small ewe your wife or daughter may have to be the "midwife." I was pleased two years ago to find that I had a new aid in helping ewes deliver. One of my daughters, then fourteen, was able to bring out a lamb I could not reach. That same evening she helped another ewe deliver live twins. I don't know who was the proudest . . . the girl, the ewe, or the veterinarian!

If the ewe you are examining is too tight to get a hand into chances are she is not ready to lamb . . . but watch her. If you get a hand into the vagina but come to a second barrier this is the closed cervix, and means the ewe is not ready or has "gone by." A ewe after laboring for a few hours will have her cervix close down, and then you are in serious trouble and probably need help. After a while experience will help you to know which ewes have closed down and which have not yet opened. If the cervix is only open a little, and there seems to be a sack of fluid between you and the lamb, wait a while . . . you are too early.

If, however, you find you can get through the cervix and the lamb is not in a normal position (normal is feet first front or back) then correction is necessary. If you have front feet, be sure the head is coming, too, before you start to pull. At all times remember to use plenty of lubrication, either soap or lubricating jelly. If you have rear feet, and you can tell these by the hocks, pull them out far enough so you can grip them with the other hand, and using the first hand as a "shoehorn" gently pull the lamb out. Be careful on these backward ones to be sure they are really rear feet, and not front feet with the head back, or one front and one back from a pair of twins.

On a front end first try to get the head into the pelvis before you pull too hard on the front legs. If a leg or the head is back, try to manipulate it into normal position; using lots of lubrication and being sure you don't tear the uterus. If you find a ewe with a lamb's head sticking out, but the feet and legs back, try first to lubricate the head and return it into the ewe. Often this is impossible, particularly if the lamb is already dead. If so, cut off the lamb's head, push the body back, and get the legs. If the ewe has twins, at least the second one may be alive.

Look Again!

After pulling one lamb, always clean up again and go in to look for a second **and third** lamb. Remember that there are two horns to the uterus, and it is easy to miss a second lamb if it is in the opposite horn from the first one.

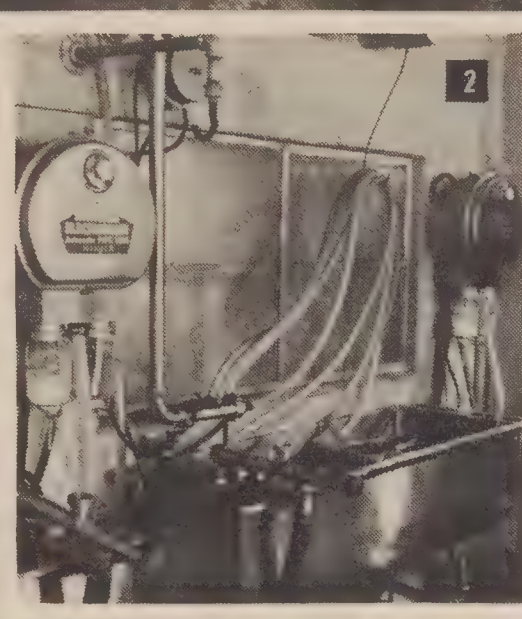
After a difficult lambing a ewe should receive an injectable antibiotic and some hormone to contract the uterus down. Since the strength of the various products varies, I shall not give the dosage here. I would suggest you get these products from your own veterinarian and in this way you will be sure of the dosage.

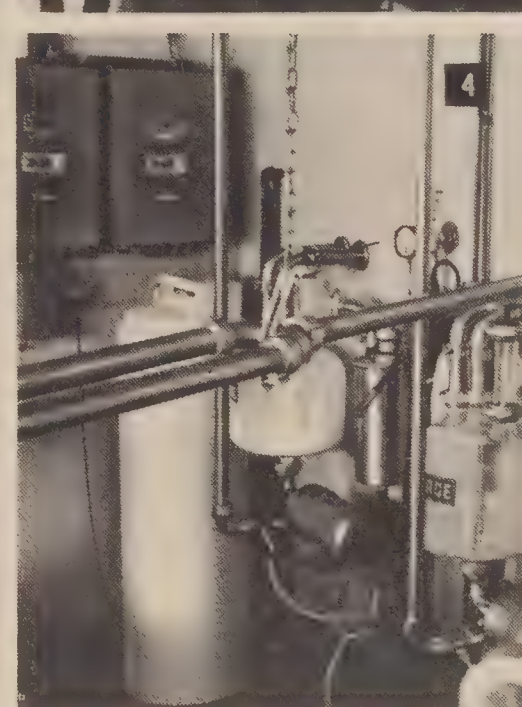
If you see you have a lamb you cannot get out of the ewe don't work on her so long that you exhaust or injure her, but call your veterinarian. Most veterinarians will tell you what is what about a lambing case, and be willing to tell you what you might have done to get this one in case you have another similar one. Of course, if it is a really difficult one, his advice will be, "If you get another one like this let me know."

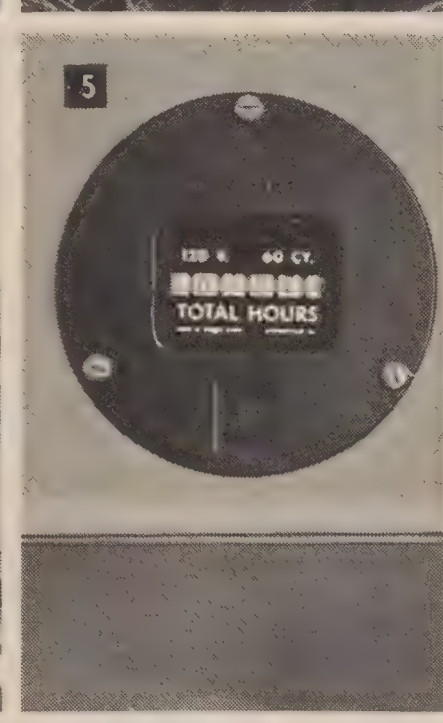
Caesarians are done on ewes, and certainly a purebred breeding ewe is worth doing one on. If you are a long way from your veterinarian he may tell you to put the ewe in the back of a station wagon and bring her in. Sheep aren't much bigger than some of the dogs treated, and some veterinarians would prefer to have them where they can work on them under hospital conditions.

I did help one ewe deliver her lamb on the living room floor in front of the fireplace in a client's house. I admit this seemed a little strange, but since it was about 20 below outside and the barn only had three rather inadequate sides I was quite pleased.

You won't get rich on sheep farming, but I know a few people who make a little extra money each year on their flocks. Almost as important as the extra income is the self-satisfaction of learning to become "a good shepherd." If you get stuck with a lambing case you can't handle, call your veterinarian and hope he has a small hand . . . or a helpful daughter.







1 A Surge Pipeline Milking System runs the full length Dr. Marks' 227 foot stanchion barn. Cows are milked groups of 118 at a time.

2 Two Surge Electrobrains make cleaning easier. Just ush the button. The Electrobrain does the rest. Men are e to do other important chores.

3 Dr. Marks uses Surge Breaker Cups exclusively. His en can see when a quarter is milked out and take off e teat cup.

4 Surge Water Conditioner softens the water. Makes eaning easier. Cuts down on water spots. Saves on etergents.

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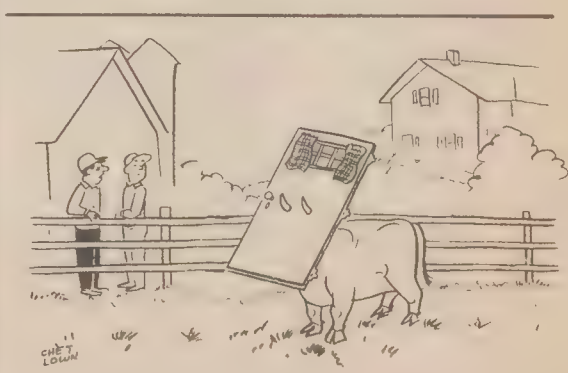
6 Free stall barn (420 x 110 feet) contains stalls for 410 ws. Corn silage, top-dressed with high moisture elled corn and 44% protein is fed in central feed bunk.

7 Cows are fed some hay and protein during milking. e insists that his men treat each cow as an individual all times.



"Last night he chased me as far as the kitchen door!"

Buckets . . . . .

(Continued from page 20)

merge, collecting tanks can be especially beneficial. These tanks can be either 20-gallon utility cans, 30 or 55-gallon drums, or even larger receptacles.

Should Drain

The outlet of these tanks can consist of almost any type of pipe fitting, but it should be located so that it drains completely. If an inlet is used, it should be located 4 to 6 inches higher than the outlet. In many installations no inlet is required, since the tubes can enter the top of the tank. They must, however, be able to drain empty into the tank.

The size of the tank is varied to suit the conditions. If a large amount of sap will be handled by the tank, and the pipeline below the tank runs through a gulley, or for some reason slow thawing is expected, the tank should be large enough to provide adequate storage.

These tanks, in various sizes, scattered throughout the bush, will do an excellent job of venting the lines, and greatly improve the overall operation, especially in large installations.

Taking Down

Tubing must be taken down not later than one week after the last run, or after the trees begin to bud. To delay permits growth of micro-organisms and makes washing and sanitizing more difficult.

Tubing should be washed within a few hours after it is taken down, and, if that is not possible, within 1 or 2 days. Normal washing and sanitizing should be carried out as follows: (Tubing in which microbial growth is excessive must be cleaned by more elaborate methods).

1. Wash all tubing in a 5 percent hypochlorite (bleach) solution.
2. Submerge and soak all tubing and fittings in hypochlorite solution for at least two hours.
3. Flush out all tubing.
4. Keep flush ends of tubing tied in bundle at all times.
5. Unroll coiled tubing after washing.
6. Lay tubing on incline to drain.
7. Hang droplines in vertical position.
8. Recoil droplines and mains for storage.
9. Store in dark, dry, rodent-free area.

Plastic tubing can be used for the full operation of sap collection and transportation, or it can be used to perform parts of these operations. Use of plastic tubing means the elimination of the most expensive operation of syrup making . . . collecting and hauling sap by hand. It is relatively easy to maintain, and its use usually results in a final product which is an improved product. Use of plastic tubing is becoming more and more popular.

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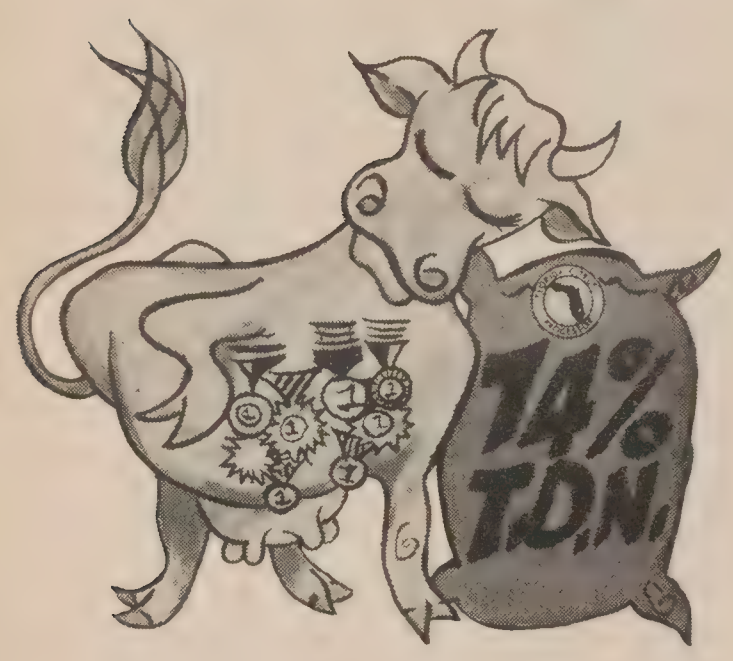

Vital to any feeding program are sufficient digestible nutrients, along with proteins and minerals. Digestible nutrients are an important part of a feeding program and Florida Citrus Pulp is your best feed buy because it has 74% T.D.N. Before planning your next feeding program, consult your dealer or distributor about including Florida Citrus Pulp in your dairy or beef feed mixes . . . available in bag or bulk . . . by rail or truck.

For more information on Feeding or Total Digestible Nutrients, send for a FREE full color Citrus Pulp Brochure, or send for "Men Who Feed the World," a 16 mm color film for group showing.

Content	% Protein	% Fat	% Minerals	% Fiber	% N.F.E.*	% T.D.N.**
Citrus Pulp	6.0	3.0	4.2	16.0	55.0	74.0
Beet Pulp	9.2	0.5	3.4	19.8	57.2	67.8
Snapped Corn	8.0	3.0	2.4	10.6	64.8	67.8

(* Nitrogen-free extract ** Total Digestible Nutrients)

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Gayway . . . . .

(Continued from page 18)

ing that workers need to be organized.

They may not think up all the arguments themselves but that won't be necesary. The organizing committees will have a lot of bright young people willing and able to supply reasons. I don't think we can stress enough the importance of every grower keeping his operation right.

Our next obvious need is to be well organized. By this I mean let's not have a half dozen weak outfits doing battle on this one. Neither geography nor commodity differences justify separate groups. We cannot afford to do less than get welded into one solid state-wide front. After that we better forget state lines and join hands across the whole Northeast. The only logical way to do this is through an existing general farm organization with enough strength and know-how to assure success. Believe me, I'm not sitting here trying to promote any one farm organization over another, but I am more than a little concerned that agriculture not lose this battle because we resort to the luxury of being divided or improperly organized.

I suggest that we learn what the law provides for labor and for employer. We had better know what changes are needed to protect **producers** and **consumers** of perishables and get cracking on some legislative effort.

Let's take the initiative on promoting our image with church people, with government people, with consumer groups, and maybe with teachers and their classes. Now, before we are behind the eight ball and under pressure, is when we can best give these folks a true picture. Let's tell it and show it like it is. If we do, it will be harder for someone to use a bunch of half-truths to hurt us later by enlisting these folks to work against us.

Seeding . . . .

(Continued from page 16)

others, most forage species grow best when the soil pH is near 7. Thus, for top forage yields, especially with acid-sensitive legumes, this pH should be your goal.

We know that adequate fertility is also essential to the success of new seedings. Phosphorus applied at the time of seeding is normally the key element in early establishment of both legumes and grasses. Some nitrogen and potassium, along with phosphorus, is also usually beneficial, depending on existing fertility levels. However, studies have shown that potassium and nitrogen, either alone or in combination with one another, may be detrimental to young seedlings when phosphorus is not included.

A complete soil test is your best guide to a sound fertility program for profitable forage stands.

There are three important points at seeding time . . . a firm seedbed, banding the seed, and the use of packer wheels.

Soil moisture is necessary for tiny seeds to germinate and grow. Making a firm seedbed to favor the upward movement of water in the soil helps to assure adequate moisture in the zone of the germinating seed.

Shallow seed placement of the tiny forage seeds is also important. In addition to seed size, seeding depth is related to soil texture and moisture conditions. In general, as the sand content of soils increase, and as the moisture decreases, seeding depth should be increased. But, a good thumb rule is to never place a seed at a depth greater than 5 times its diameter.

Proper placement of fertilizer in relationship to the germinating seed is also important, especially on low-fertility soils. As mentioned previously, **phosphorus** is especially important at this point.

Placement of this phosphorus is critical if it is to be effective. In fact, several studies have shown that seedlings had to be **directly over or within one inch to the side** of a fertilizer band in order to obtain 60 percent or more of their phosphorus from applied fertilizer during the first two months of growth.

Band seeding . . . the precision placement of fertilizer in relationship to the seed . . . has frequently resulted in 20-50 percent more seedlings per unit area, taller, more-vigorous plants, improved winter survival, and higher initial yields.

More recently, we've found that the use of packer wheels in conjunction with band seeding provides additional insurance for good stands. Recommended in several eastern states, including New York and Pennsylvania, packer wheels assure a firm seedbed in the zone of the germinating seed.

If the seedbed is dry, and packer wheels are not used, cultipacking both before and after seeding in the same direction as band seeded is essential.

Editor's Note:

John Baylor will continue his discussion of forage seeding management in next month's issue.

ASPHALT ROAD

An asphalt highway to higher yields may some day lie beneath millions of acres of reclaimed land and hold life-giving water within the reach of thirsty crops never before grown there. Michigan State researchers A. Earl Erickson, soil scientist, and Clarence M. Hansen, agricultural engineer, in conjunction with the Research and Development Department of the American Oil Company, have designed a unique way to "pave" the road to land reclamation.

The new device puts down a rapidly-cooled, ⅛-inch-thick strip of asphalt emulsion about two feet under the soil surface. The resulting artificial "hardpan" doubles the soil's water-holding capacity but does not cause flooding. Gaps are left at normal tiling breaks to release excess water during heavy rains.

In one week, a dry field could be layered and prepared to sustain crops and to hold twice as much water for more than 15 years. Erickson commented, "Although the barrier is being used to create rice patties in some tropical regions, it will be of the greatest value beneath sands and other soils of low-water-holding capacity."

With the new apparatus irrigation would become more practical. New water resources created for irrigation projects by the construction of giant dams will be utilized more efficiently

Installation costs per acre during the experiment were less than $250; Erickson estimates that this will eventually be reduced to between $150 and $200. This, coupled with increased fertilizer retention and utilization, add up to higher income above cost and higher yields, which enable the barrier to literally pay for itself.

American Agriculturist, March, 1969

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David Tuthill finds a nice hill of early-set Norgolds.

GRASS IS FOR COWS

but not for potatoes . . .

"WEEDY potatoes are a mess, and it's not only because the weeds take out a lot of the nourishment that would otherwise go into the potatoes themselves."

Long Island potatoes . . . like their Maine and Idaho cousins . . . are world-famous, and the statement above comes from a voice of experience in Long Island potato growing . . . Allan Tuthill, of Mattituck, New York. The Tuthill family has been growing spuds out on the eastern end of "The Island" for generations, and Allan's son David is following in the family footsteps, taking over a large part of the operation now.

Late Grass

"What I mean is," Tuthill continues, "the late grass problem that cuts into your yield at harvesting. Once the vines start lying down, they don't shade out grass any more, and it really starts growing. Naturally, you can't get in after hilling, so the grass has to stay. Not only does it cut down on potato growth, but it makes harvesting much tougher. If the grass isn't there, you can run the combine slower and save more potatoes."

A couple of years ago, the Tuthills tried out Dacthal, a preplant weedkiller specifically recommended for potatoes. Results were good, but the price at that time was high. "We heard that Dacthal herbicide would do at least as good a job as the one we were using and, since the price was reduced in 1968, we could do it at lower cost. We put the Dacthal on just before the third cultivation, then cultivated and hilled up immediately. No incorporation was necessary."

Dacthal was put on at a rate of 10 pounds per acre in 80 gallons of water on the sandy soil. The Tuthills give their potato sprayer much of the credit for a good herbicide application. It has positive, propeller-type agitation, and "we keep the agitator running while we're filling, mixing and spraying the material," David says.

"As for fertilizer," David says, "we usually put on a ton of 10-20-10 at seeding, and sidedressed with liquid nitrate. In 1968, we cut out the sidedressing and added a 300-lb. plowdown application of 16-8-8 in the early spring."

"I don't think it was a good test for the plowdown fertilizer," he adds, "because we were a little late getting it on, and I think we may have plowed it down too deep."

When the crop's going well, the Tuthills don't want anything to spoil it, so they're ready to apply any or all of the following should any problems appear: Guthion for bugs, DDT for leafhoppers and/or cornborers, Metasystox R. for aphids and Manzate-D for blight. David says he's switched from high to low pressure for applying these chemicals with the sprayer. "I like it much better; we get less runoff and a finer mist with the 180–200 pounds pressure."

Did the excellent crop mean the 1968–'69 marketing season would turn out to be a big-money year for them and other Long Island potato growers?

"All depends," the Tuthills report. "It costs us $450 an acre to raise potatoes, on the average. A price of about $2 a hundredweight will just about let us break even in a normal crop year."

DDI-USDA-ADA

Dairy Development, Inc., a research organization sponsored by 13 Northeast cooperatives, is already working with the USDA on research to improve existing dairy products, and to develop new ones. The American Dairy Association is also working jointly with DDI in dairy product development work.

Research work will be aimed at products incorporating consumer preference, longer shelf life, eye appeal, and packaging improvements . . . with emphasis on boosting the use of fluid milk.

AGENTS HONORED

Two New York State Agricultural Extension Agents have been cited for their outstanding contributions to agriculture by the National Association of County Agricultural Agents.

Richard L. Pease of Middleport, Niagara County, and Horace A. Smith, Jr. of Middletown, Orange County, received distinguished service awards from the national organization.

POTASH PLACEMATS

Need placemats for your Grange suppers or dairy co-op banquet? They're available for two cents each from The American Potash Institute, 1649 Tullie Circle, N.E., Atlanta, Georgia 30329.

Their motif is "Grow 10-Ton Alfalfa," and they are imprinted with some information on how to do it. If the speaker is dull, you'll have some interesting reading!

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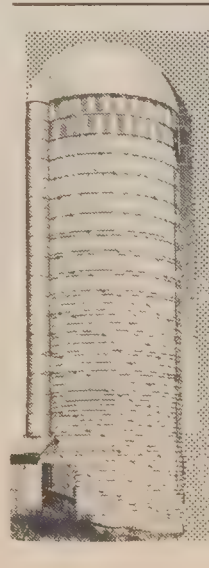

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PROBLEMS EVERYWHERE

by Amos Kirby
New Jersey Editor

WHAT are farmers thinking and planning for 1969? In recent weeks I have travelled over 16,000 miles in the United States and Mexico, and I find big corporations and small farmers with similar problems to those faced in the twelve northeastern states.

Costs and Prices

The problems of a New Jersey poultryman, a New York dairyman, or a Maine potato grower are very similar.

Take a look at the cattle industry. In an interview with the secretary of the California Cattlemen's Association I learned that on range land selling at about $100 per acre the tax is $2 per acre. That is low by standards in the East. **But** these cattlemen measure taxes in terms of how much land it requires to produce a unit of a marketable product. If it requires 10 acres of land to support one cow and calf, that is $20 per feeder animal. If that calf or feeder sells for $100 per head, the tax on the land equals 20 percent of the cost of production!

On the King Ranch in Texas, with improved pastures it requires four to five acres to support one cow and calf. On unimproved range land it takes up to 30 acres, and in Arizona one county agricultural agent estimates that it requires up to 40 acres for a cow and calf. Similar yardsticks apply to tomatoes, eggs, and milk.

If my yardsticks on labor costs are reasonably correct, Eastern vegetable costs, including harvesting, requires close to 30 percent of the selling price.

California economists tell the world that they are paying the highest farm wages in the world. An examination of the reports from the U.S. Department of Agriculture show that the base rate is $1.65 per hour. In Hawaii, the most highly-organized state in the nation if one includes the fringe benefits, it would require a computer to determine which area pays the highest wages.

As this is being written, I am in the famed Delano grape-growing area where the boycott has been centered. I am still digging into this redhot issue. While it is 3000 miles from your farm, it could be in your backyard tomorrow in one form or another.

We are told that the objective of unionization of farm workers is to raise the living standards of grape vineyard workers to a higher level. Even the growers themselves have told me that they accept that goal. What the organizers do not tell is that they are interested in the quarter of a million dollars a month they would collect from these workers!

Going Broke

Believe it or not, growers are going broke under prevailing farm costs, and inability to sell their crops at a price that covers the costs which even a 20-cow dairyman has to face regardless of where he lives.

What California growers are seeking is a uniform wage level for the entire United States. On the East Coast, especially in my home state of New Jersey, most growers are paying much higher wages than are paid in competing states to the south.

Picture Changing

In my out-of-state travels since last October I have been startled at the changes taking place in farming operations. Maine has moved into the growing of sugar beets to diversify from potatoes. Apple and peach orchards are now on some of the very finest potato and vegetable areas in New Jersey.

At the California Asparagus Growers' Association at Stockton I found the directors pouring over statistics showing that Taiwan has about taken over their white asparagus markets in Germany. They are worried.

I spent the greater part of one day with the research director of

(Continued on next page)

Thimet 10-G knocks out insects that fight bean yields

Some growers have increased field bean yields by 15%, snap and lima yields up to 30%. How? By using Thimet® 10-G to control leafhoppers, aphids, thrips, mites, seed corn maggots and Mexican bean beetles. Thimet also helps stop bean mosaic and curly top by eliminating disease-carrying insects.

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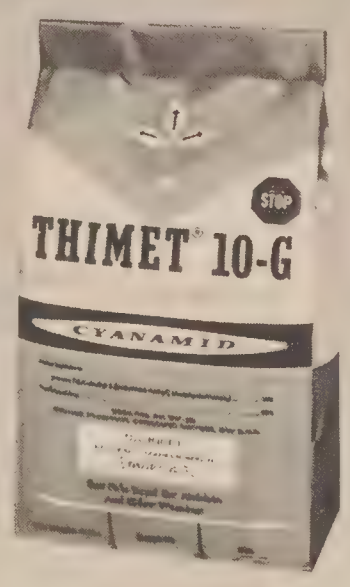

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"But when my lumbago does go away, you'll be the first to know, Dad."

the Dole Company in Hawaii, and learned that because of high costs, Hawaiian growers are now either growing in the Phillipines or turning to Africa for expanded planting, where costs are lower. The next time you buy a jar of strawberry jam . . . a favorite in most homes . . . the chances are that those strawberries were grown in Mexico. Danny Danneberg, a big vegetable grower in the Imperial Valley of California, told me that a large percentage of the cantaloupes that come from that state are now grown in Mexico, hauled across the border, and sold at El Centro and other nearby markets.

The eastern mushroom industry centered in southeastern Pennsylvania is having to face competition from Taiwan. This industry may not be on the rocks . . . but those low-cost mushrooms from the Far East have become a problem.

Mechanization

The classic example of mechanization following the grain combine has been the mechanization of the cotton plantations in the Southwest, and tomato harvesting in California. In 1968 California harvested about five million tons of tomatoes for processing, about 90 percent by machines. At the same time, it is estimated that another million tons were not harvested because of the inability of the existing plants to process them.

Asparagus

California asparagus growers feel the loss of their German market to Taiwan of greater concern than competition from New Jersey and other Eastern areas. But this does not mean that they are not watching our local supplies as closely as we watch what our neighbors are doing. Let the weather turn warm on the East Coast and asparagus appears in New York, and they begin to trim shipments to these markets.

California asparagus acreage has been declining, but it is levelling out and may soon start to move upward. They are working on new varieties and new planting practices, just as is being done along the Atlantic Seaboard.

Machines for harvesting asparagus is a hot subject in the Stockton area. They use all the machines now in use in Michigan and New Jersey, and they have another that they tell me looks as good or better than those now found in the Northeast.

While New York has been experimenting with apple harvesters, the wine growers on the West Coast are turning to mechanization. There is the matter of bruising, but with some changes in pruning, grapes for wine and juice may soon be shaken from the vines.

Frost Fighter

On the parking lot at Bakersfield was a truck with a new type of machine that will be on the farm scene in the future. It is called a "frost fighter." This is a machine that blows heated air over berry and fruit orchards to eliminate frost damage. One machine will protect up to three acres. It burns fuel oil, throwing out a half million BTU per hour. California is taking most of the supply in 1969 . . . but don't be surprised if one of your neighbors has one in the future.

Change! Change! Change!

In the past ten years I have crossed the Rockies fifteen times from Canada to Mexico, finding constant change in farming practices, crops, diversification . . . and the thinking of farmers.

If allowed to continue and spread, strikes and boycotts at harvest time are greater threats than drouth and prices!

Let me repeat: Farming is changing. It will never be the same. Eastern growers need have little fear of the competition from California. The way good farmland is being used for new housing and industry is the same pattern as in New Jersey, Long Island . . . and now moving into Delaware. When I first visited Amarillo, Texas, in the 40's, it had a population of about 5000; it is now a city of over 130,000, with one-way streets and ten-story buildings. It can be duplicated even in Hawaii.

When I speak of less competition from California, remember that that state has a tremendous population of its own to feed, and if the trend continues, Hawaii alone may one day consume about as much as New Jersey produces.

"Yes, I guess the government officials should follow our system and do more pruning and less grafting!"

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Donald Patch, the older son, moving hay within reach of the cows.

Wallace Patch and one of the fans which run on an overhead track.

TOPS IN DAIRY EFFICIENCY

by Jeanie Begg Markmann

"THE more ingenious a farmer is, the more successful," is the opinion of Wallace M. Patch. And he seems to have proved it, for Walhowdon Farm, operated by him and his two sons Donald and Howard, earned the 1969 Ford Farm Efficiency Award for their dairying operation. The award was earned not only for milk production, but for the condition of both the herd and the barn.

Over the past six years Patch production of milk has averaged more than 16,500 pounds of milk and 600 pounds of butterfat. On 54 milkers, their herd improvement registry record was 18,746 pounds of milk, 710 pounds of butterfat.

The Patch farm is set high in the hills above Route 120 leading from Meriden to Lebanon. Their 100 or so acres of tillable land are surrounded by brush land and timber. They plant about 30 acres to corn for silage, 10 to 20 acres to alfalfa hay (besides acres seeded to grass hay), and a few acres are used as "loafing pasture" for the cows in summer.

Soil for growing corn and hay is fertilized according to recommendations from the University of New Hampshire, and from fertilizer companies. They also use Atrazine for weeds, and sometimes Eptam.

Value Increases

From their corn plantings, fertilized last year with 8-12-16, and with no other chemical fertilizer applied before plowing, 30 tons of corn silage per acre was harvested to fill their four upright silos.

If planted early and allowed to stand as long as possible, corn increases in nutritional value, the Patches believe. In the milk stage, the silo squeezes moisture out of it; so they wait until the corn reaches the hard dent stage and gets down to 70 percent moisture before ensiling it. It is stored as harvested, without addition of urea.

The Patches cut hay as early as possible, and usually get three cuttings of alfalfa hay a season. Alfalfa is cut at the first sign of a blossom.

Their hay is 50 percent field-dried before being put in a separate barn rigged with a heat drier serviced with oil. The result is green, sweet-smelling hay, produced at the rate of three-and-a-half tons per acre . . . and savored by their cows.

Good Management

Contributing to the high place the Patch farm has earned besides the feed they raise is their management of their 112 purebred Holsteins, which have been classified as an outstanding breeding herd by the Holstein-Friesian Association.

An old stanchion barn was remodeled to keep the cows in top production. Each comfort stall, from 4 to 4½-feet wide, has a rubber mat, and the cows are tethered in such a way that they can turn their heads around to either side. They are ranged in two rows on each side of a feeding alley, facing into it. Behind each row is a mechanical gutter cleaner that empties into a pit outside the barn. After this has been operated, bedding from calf pens and hay and silage debris is raked into the gutter as "blotter." As a result, all cows in the Patch barn are spotless; even their tails are dry.

Cows are barn-fed all year, but in summer are put in a loafing pasture between the 6 a.m. and the 6 p.m. milkings.

In summer, large 42-inch attic fans operated by one-third horsepower motors are hung at each end of the feed alley, facing into it. The Patches have framed the fans with wood, and covered front and back with chicken wire for protection. They are suspended on short chains from a track that permits them to be pushed aside when not in use, or when equipment is being moved into the feed alley. Wallace Patch thinks it would be better if the motor was installed in an upper corner instead of in the lower, as at present. In winter, the fans are

(Continued on next page)

unhooked and stored near the silos.

The fans are turned on . . . even in the evenings . . . whenever the outside temperature is 60 degrees or above. Besides keeping the cows' heads and necks cool, they provide comfort for the men working in the barn.

Feeding

Cows are fed at each milking, silage first, then grain (at a 25 pound maximum) during the actual milking; then they are given hay. In winter, each row of cows is released in the morning after being milked, and permitted to go outside the barn for five to ten minutes. During this brief daily exercise, heat periods in individual cows can better be observed, the Patches say. Meantime, bales of hay are dropped from the loft into the feeding alley before the cows are released, and loosened while they are outside, so they can eat it on return.

The Patches take such care of their herd that, although the alleys are perfectly dry, grit is spread on the cement floor before releasing the cows just to insure sure-footedness.

Milk is picked up at the farm every other day by the Concord Dairy.

Still other herd management practices followed are keeping heifers in stanchion stalls until they are completely accustomed to being milked, and keeping young calves in like confinement until they get over bad "baby habits," such as sucking each other. Older calves are held in pens with not many more than six in each group. Their contentment is evidenced by their habit of occasionally playing "Ring-around-Rosy" with each other, in an amusing living merry-go-round, before settling down to rest.

Two bulls are kept in pens away from the cows, although Wallace Patch says it is safe to run a young bull with a virgin heifer. However, to prevent spreading disease, Walhowdon cows are not bred directly. The semen is collected and held until needed in a freezing unit with a 300 degree and below-zero temperature, and the cows artificially inseminated.

The large cattle barn, now some 100 feet long, was remodeled in 1955, and lengthened to accommodate 15 additional head. Ceilings are low, some 7½ feet, which makes it warmer in winter. Jerseys formerly were the breed kept on the farm, but starting in 1947 the change to Holsteins made it necessary to lengthen stalls from 56 inches to 65 to 72 inches.

The Family

Walhowdon Farm . . . the name is composed of the first part of the names of the three owners, Wallace, Howard and Donald . . . had been in Lebanon's Hough family around 200 years when, in 1938, Mrs. Patch's father, a Hough, invited Mr. Patch (whose profession was automobile mechanic) to build a house up on the farm's hill. In 1947 Wallace Patch, a native of Massachusetts but brought up on a Hartland, Vermont farm, found the Hough farm left in his hands. "Whatever success it now enjoys," he says, "is the result of teamwork."

Donald, his older son, "does the cleaning out and heavy feeding. Howard, the younger son, does the milking. I act now mostly in an advisory capacity."

Howard, Mr. Patch reports, is an expert on selection of sires, and makes decisions on the mating. Donald, who substituted a seminar year in agriculture at the University of New Hampshire for his senior year in high school, does the artificial insemination and much of the veterinary work on the herd, skills he learned at the College.

Both sons are married, and share the remodeled 200-year-old Hough farmhouse. Donald met his wife, Adele, sixteen years ago at a women's milking contest. They have three children, a boy and two girls. The boy, 13-year-old Arnold, was reported by his grandfather to prefer working in the barn with his father to skiing, coasting, or other play. Adele, who was born on a farm in Woodville, New Hampshire, is the gardener of the family, keeping the freezer filled with vegetable produce.

Howard's wife, Jean, a native of Lebanon, is a registered nurse. They have three girls and two boys, and all eight of the third generation of Patches are 4-H Club members.

One thing this farm doesn't have is a mortgage. Wallace Patch has seen to that. And he has it ingrained in his sons that any debts should be paid off each year, and that they should not live on borrowed money.

"We do most of our own mechanical work," Wallace reports, "and remodeled the barn the conservative way, paying each year . . . year by year . . . so today—no mortgage."

And it hasn't been all work and no play. During 1967 Wallace Patch and his wife went west to the Holstein-Friesian convention in Milwaukee, Wisconsin, and then on to visit relatives at Lake Tahoe, Nevada.

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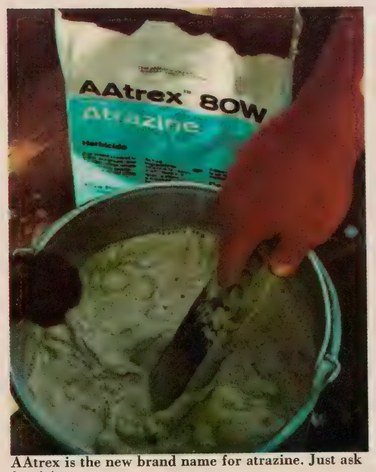

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Grand Champion Charolais Female at the Pennsylvania Farm Show was Libby JC. Behind her (l. to r.) are: Buzz Garey, Charolais Sale Manager; Professor Myron Lacy, judge; Tom Welsh, manager of Green Cove Farm; Dave Dilullo at the halter.

CHAROLAIS AT PFS

The Charolais breed was represented for the first time at the last Pennsylvania Farm Show. Exhibitors included (all Keystone Staters):

Flying Horseshoe Ranch, Morris

Green Cover Farm, Avella

Jameson Charolais Farms, New Castle

Karimor Farms, Hawthorn

Mal-Allen Farm, Rahns

Manatawna Farm, Philadelphia

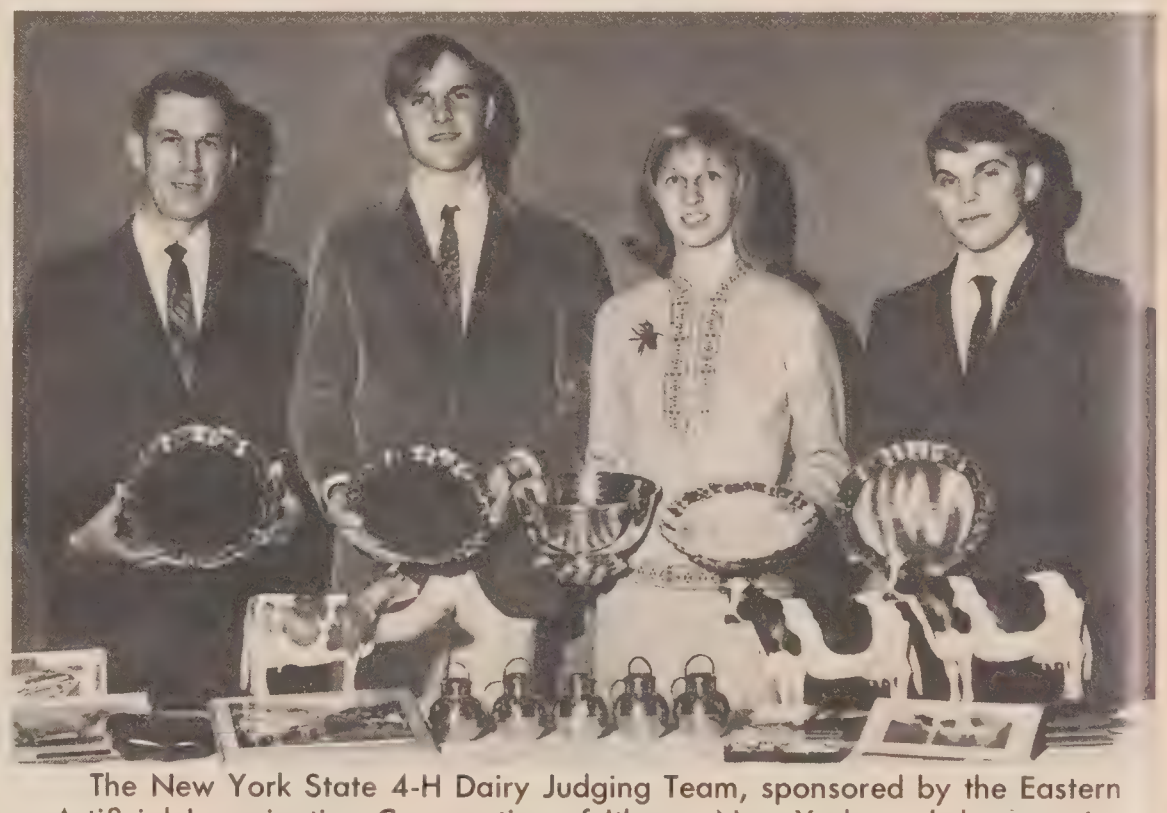
Union Area FFA, New Castle

Richard Shidemantle, Conneautville

James B. Wentzel, Selinsgrove

Top honors went to Karimor farms (Junior Champion Female, Senior and Grand Champion Bull); Green Cove Farm (Senior Champion Female, Grand Champion Female); R. A. Shidemantle and Sons (Reserve Grand Champion Female, Reserve Grand Champion Bull); and Mal-Allen Farm (Junior Champion Bull).

The Colonial Charolais Association promotes the breed in the Northeast; its address is 11 W. Pennsylvania Ave., Towson, Maryland 21204.



The New York State 4-H Dairy Judging Team, sponsored by the Eastern Artificial Insemination Cooperative of Ithaca, New York, and the counties involved, who placed first . . . with a commanding 57-point lead over Minnesota . . . at the Chicago International 4-H Dairy Show Judging Contest. A different team also placed first at the National 4-H Dairy Judging Contest in Columbus, Ohio, the first time any state has placed first at both competitions the same year.

Left to Right: Professor D. A. Hartman, coach, Cornell University; John Runge, Onondaga County; Jeanne Vreeland, Orange County; Richard Janiga, Erie County. Nancy Bossard (not shown) Steuben County, is also a member of the team.

STOCK SHOW

The 20th Annual New York "Meat Animal" Show and Sale will be held at the Empire Stockyards, Caledonia, New York, on Thursday and Friday, September 4 and 5, 1969.

Entry forms and copies of the show provisions may be obtained from county Extension offices, the Department of Animal Science, Morrison Hall, Ithaca, New York, and from John Moran of Caledonia. This show is open to residents of New York State, and it includes a 4-H Division and an Open-Class Division. The 4-H Division carries a classification for pens of three hogs, pens of three lambs, and also for individual hogs, lambs and steers. The Open-Class Division has a full classification for pens and singles of all species.

AGRICULTURAL RESOURCES COMMISSION

Governor Rockefeller has named nine Empire Staters to a New York State Agricultural Resources Commission:

Stuart Alexander, dairyman, Marathon

Russell Billings, president of the Stanford Seed Company, Hamburg

Dr. Donald Brown, rural sales manager for Niagara Mohawk Power Corporation

Everett Chamberlain, vice president of the Ivor B. Clark Company, Port Washington

Gordon Conklin, Editor of the American Agriculturist and Rural New Yorker, Ithaca (Chairman)

Charles D. Gibson, beef cattleman, Hillsdale

Allen Ostrander, dairyman, Theresa

Paul Taber, public relations director of Agway, Fayetteville

Dr. Donald VanWaes, president of Whitestown Sewer Co. and vice president of Harts Hill Acres, Inc., New Hartford.

Ex-Officio

In addition, ex-officio members include the:

Commissioner of the Department of Agriculture and Markets

Director of the Office of Planning Coordination

Dean of the N.Y. State College of Agriculture

Commissioner of the Department of Commerce

Commissioner of the Department of Conservation

The Commission is charged with the responsibility of developing recommendations regarding ways to reconcile urban growth with a strong agricultural economy in the State. It will work closely with the Department of Agriculture and Markets, as well as with other departments of State government, in matters affecting farming and agribusiness.

In doing so, it will work to implement . . . and expand . . . recommendations made by its predecessor, the Temporary New York State Commission for the Preservation of Agricultural Lands.

That Commission made a number of recommendations to the Governor, three of which have been implemented:

1. Liason between the Department of Transportation and the Department of Agriculture and Markets has been set up. This provides for evaluation of alternative locations for highways from an agricultural point of view. The arrangement has been formalized by action of the 1968 Legislature.

2. As a direct result of Commission recommendation, the 1968 Legislature passed a law which provides for a 5-year tax exemption of farm buildings built or remodeled after January 1, 1969.

3. A permanent Agricultural Resources Commission, as already mentioned, has been formed. This Commission will carry on the work of the Temporary Commission.

EMPIRE MANAGER

Robert J. Lathrop, R.D. 1, Freeville, has been appointed General Manager of Empire Livestock Marketing Cooperative, headquartered in Ithaca, New York.

For the last eight years he has operated Bob Lathrop, Inc., a firm specializing in farm and livestock auctions in the Central New York area. "Business generated through Bob Lathrop, Inc. will be handled through the larger facilities of the Empire organization," Lathrop said, "but will continue to receive my personal attention." He also has a 100-cow Holstein herd, with about 50 milkers, which he will continue to operate.

In his new capacity, Lathrop is responsible for the operation of Empire, statewide livestock marketing organization owned by its users, which holds weekly commission sales at eight locations, daily sales on the Buffalo Terminal Market, farm auctions, and on-farm dispersals and other livestock industry services. Empire markets are located at Bath, Bullville, Caledonia, Dryden, Gouverneur, Oneonta, Watertown, and Whitney Point.

The information contained herein is general in nature and is drawn from sources deemed to be reliable. Any application to a particular farming operation requires the advice of qualified experts and is subject to limitations of good management, weather and other conditions present at the individual location.

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County_____State_____Zip Code_____

Dan's entire herd is on corn silage dry lot feeding throughout the year.

CORN AND COWS

IN a day of rapidly-increasing migration from farm to city, Dan and Betty Williams of Harrington, Delaware, are an exception. Sixteen years ago Dan abandoned a promising career in chemical engineering and turned to farming. "I just wasn't happy with engineering," he explains. "It was too much like the army . . . too many channels, too much red tape."

"I guess I was in favor of the farming idea too," comments Betty. "I was tired of being a company wife. Besides, I liked the idea of living in the country."

Since neither had been raised on a farm, Dan became a special student at Cornell, and took courses in animal husbandry, agronomy, and farm management. In 1952, the couple moved to Delaware, and with the help of New Castle county agricultural agent Ed Schabinger Dan found work as a field hand near Port Penn.

A short time later he was appointed herdsman for the farm's purebred Guernsey herd, and in 1956 was offered a chance to either manage or rent the farm. He and Betty chose to rent.

Work Never Ending

"The work just never seemed to end," he recalls. "We raised corn, wheat, barley, and beans, but somehow the income just never managed to pay the bills. We discovered rather quickly that dairying was the only way to get ahead."

The young farmer soon discovered the difference between academic theory and practice. "I planted 45 acres of alfalfa one spring," he explains. "It came up beautifully . . . but then it started to turn yellow. I waited and waited and waited and the alfalfa got yellower and yellower. By the time I decided to call the county agent, the crop was a total loss." Dan laughingly comments that he has never planted alfalfa since.

"Another time we grew a really good crop of oats. But instead of combining them when I should have we decided to go to the beach. When we got back, a heavy windstorm had combined the crop for me. All I got was one load of oats . . . and a bitter lesson in timing."

Guernseys to Holsteins

Dan and Betty entered the dairy business with two Guernseys. The rest of the herd were owned by the landlady. "As we accumulated a little money, we'd buy another cow or a piece of machinery," he explains. "Eventually we ended up with about 40 Guernseys." As rich Golden Guernsey milk prices declined Dan switched to Holsteins. "By the time we left New Castle county, the herd was almost completely Holsteins," he says.

"We just couldn't seem to get ahead those first few years," he adds. "Milk prices kept going down and costs going up.

"When we first came to Delaware we looked at farms in the New Castle County area, but of course we had no money. By the time we managed to save a few dollars, the farm that had been $30,000 was $90,000. It was almost impossible for a newcomer to break into farming in northern Delaware."

As things went from bad to worse, Dan and Betty almost gave up. "One fall I decided to put up a bunker silo to get the herd through the winter and sell out in the spring," says Dan. "I wrote to Wilbur Hesseltine, Extension dairyman at the University of Delaware, for plans. But when the plans arrived there was a crisp note attached. "Is this what you're going to do instead of buying a farm?" I thought the situation over, and decided Hesseltine was right. Maybe there was still a chance.

Hesseltine told Dan that he'd seen some nice farms in Kent and Sussex counties, and offered to help them locate a suitable place. Dan jumped at the offer. "The first time I saw this place was in February, and to be quite honest about it, I was very unimpressed. It had been pouring rain, and I thought the farm looked just like the mudhole I was farming upstate."

A few months later, Dan and Betty were travelling downstate to visit friends, and Dan pointed out the farm Hesseltine had shown him. "That's a nice place," said Betty. "Let's stop and look at it." Dan had to admit that it didn't look so bad after it had dried out.

In January, 1965, Dan and Betty bought the farm, 185 acres, 130 tillable. "Of course, the whole farm is planted to corn," he says. "The cows are on drylot feeding with year-round silage, and are milked in an eight-stall herringbone parlor." The entire system, designed by Ernie Walpole, Extension agricultural engineer at the University of Walpole, was set up to require as little labor as possible because of their limited capital, Dan explains.

"Our operation is fairly simple," he adds. "Corn and cows. We feed them and milk them and that's about it. Our present herd numbers about 135 head. We're milking 60 and have about a dozen bred heifers that will calve in the next few months. We also have about 20 steers . . . but a shortage of facilities will put us back into dairying as soon as this lot is sold."

Dan's herd is averaging about 13,200 pounds of milk and about 520 pounds of butterfat. "It has been higher," he explains, "but we had a dry year, a shortage of feed, and were forced to buy hay in the spring. Now that we've had another good crop year the cows are coming back, and I expect their average to improve."

A Good Year

In spite of an extremely-poor crop year in Delaware, Dan feels he's done well in 1968. "We had a few showers here in July that our neighbors just didn't seem to get, and this is what really saved our crop. Our best acreage yielded about 20 tons of silage; our worst about 12 tons. I have a heavy farm . . . heavy for down here. Compared to the New Castle farm, it's really quite light. It's not really sandy, and the soil seems to hold moisture. In drier years I seem to make out better than my neighbors."

Dan and Betty relax for a few moments after milking.

"I think one reason our crops turned out so well is that we got the corn in early," comments Betty. "I feel that a little longer growing season always produces a better crop, and it's certainly proved true for us this year. As it turned out, the last corn we planted was the worst . . . and of course the earlier corn was better. In any case, planting was completed by May 10."

"Since we don't hire any extra labor, I usually get done planting well into June," says Dan. "But since my equipment is getting old and my tractors are fairly small, I hired my plowing done this year. The plowing was done in two-and-a-half days, and consequently I was able to get my crop in two-and-a-half to three weeks earlier than normal."

Custom Plowing

Dan was most satisfied with the results of his custom plowing adventure, and intends to continue the practice in 1969. Commenting on 30-inch rows, Dan says that he likes the idea, but that it would mean buying equipment. "For the time being it's more economical for me to stay with the 36-inch rows," he says. "But when we're forced to buy new equipment, we certainly intend to convert to narrow rows. I feel that the higher plant populations help shade the ground and conserve moisture, and I certainly think that narrow rows will outyield conventional rows, particularly in the drier years."

Dan began feeding all-corn silage after the cows ate all the hay in a dry summer. "All I had left was corn silage," he says, "so I started feeding that. The cows did well on it, there were no ill effects, and I decided that a corn silage ration would eliminate the labor of baling hay. We don't even feed hay to our calves . . . they either live on corn silage or go hungry."

Economically speaking, Dan feels that corn silage gives the better return than selling corn on the open market. "I figure that corn put through animals is worth three times the market price of corn," he says. "And considering that we use the entire plant, it's probably even more valuable. We filled one small silo with corn cob meal one year when corn was 85 cents a bushel. We figured we got about $2.10 for it by putting it through the cows."

Dan has added urea to his corn silage twice in the past four years. "The first year, I tried urea in one small silo with good results. The second year, we had trouble with silo gas, so I felt it would be questionable to add more nitrates. In 1967 I put it in both 20×60 silos with good results. In 1968, however, we decided to eliminate urea in the silage to reduce our labor . . . but we're

(Continued on page 38)

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Massey-Ferguson The Challengers

Massey-Ferguson Inc., Des Moines, Iowa

Corn and Cows . . . . .

(Continued from page 36)

feeding it in my grain mix in the milking parlor."

Since Dan's farm isn't large enough to grow all the corn he needs, he buys shelled corn and feeds a grain mix of corn, soybean oil meal, salt, minerals, molasses, and urea.

"In 1967 we put about 3000 bushels of high-moisture corn cob meal in one of our silos and fed it mixed in with silage and soybean oil meal," says Dan. "We stopped feeding in the parlor, and fed everything along the fence line feeder. The cows accepted the new ration quite well. Milk production remained about the same, but butterfat went up. We went from a 3.7 dairy test to a 4.3; the DHIA tests were even higher. In fact, our average test rose to four percent, and I think that's pretty good for Holsteins.

"We like high-moisture corn real well, and think that's the way to go," he adds. "But we need all our silos for silage space. It's cheaper to buy grain than it is roughage, so until we can find a way to store high-moisture corn, we're going to have to do without it. We thought about buying a Harvestore 20×30, buying high-moisture corn at harvest, and developing our own feed system, but the cost would be about $11,000, so we decided to wait for a while.

Dan is also president of the Delaware Dairy Herd Improvement Association, and feels that the DHIA is indispensible to the dairy farmers. "DHIA herds run approximately 4000 pounds more milk per cow per year than non-DHIA herds," he says. "And membership is cheap compared to the services, records, and other member benefits."

For the past two years Dan has been a subscriber to ELFAC, a computerized record service in the northeastern states. "ELFAC has been a big help to me," he comments, "especially at income tax time. Everything is figured for you; all you have to do is copy it on the tax form. I used to have a terrible time with depreciation, investment credit, and other things. ELFAC solves these problems. The computer print-out shows how much I took in, how much I spent, and where I spent it. It also compares these records with past years, and provides a month-to-month profile of my financial operations.

Success at Last

Dan and Betty Williams have come a long way since they turned to farming sixteen years ago. They have three children, own their own farm, and, most important, they're farming successfully.

"One reason we're successful is the fact that we have no hired labor, and we have a high volume of production for a family operation," says Dan. "We have very low machinery costs. We don't need our plows any more . . . we have a disc, a cultivator, a corn planter, a chopper, and two chuck wagons. This is about all the equipment we need aside from two older tractors to pull wagons, one to blow silage, and one to chop. Actually, our machinery investment compared to our income is probably lower than average.

"I feel that the reason we're having a comparable amount of success here is the fact that we've been able to triple our milk income compared to our New Castle County farm," adds Betty. "And I would imagine that we've been able to cut our expenses almost in half. Of course, that means a lot more money to pay the bills."

Good Advice

Dan and Betty also have a few words of advice for young people who want to farm: "For a young fellow to start farming today, he's going to have to want to farm more than anything else. There's a lot of hard work and heartbreak and discouragement in this business, and the situation for the farmer is getting worse . . . the farmer's just not getting a fair return for his labor. It's a rough road for a young man to start getting the capital to get set up the way he should.

"We haven't set our business up for our children," they add. "We feel they should get an education so that they have a choice of professions. If they still want to farm after trying something else, well and good. But they shouldn't limit themselves to being farmers right from the start."

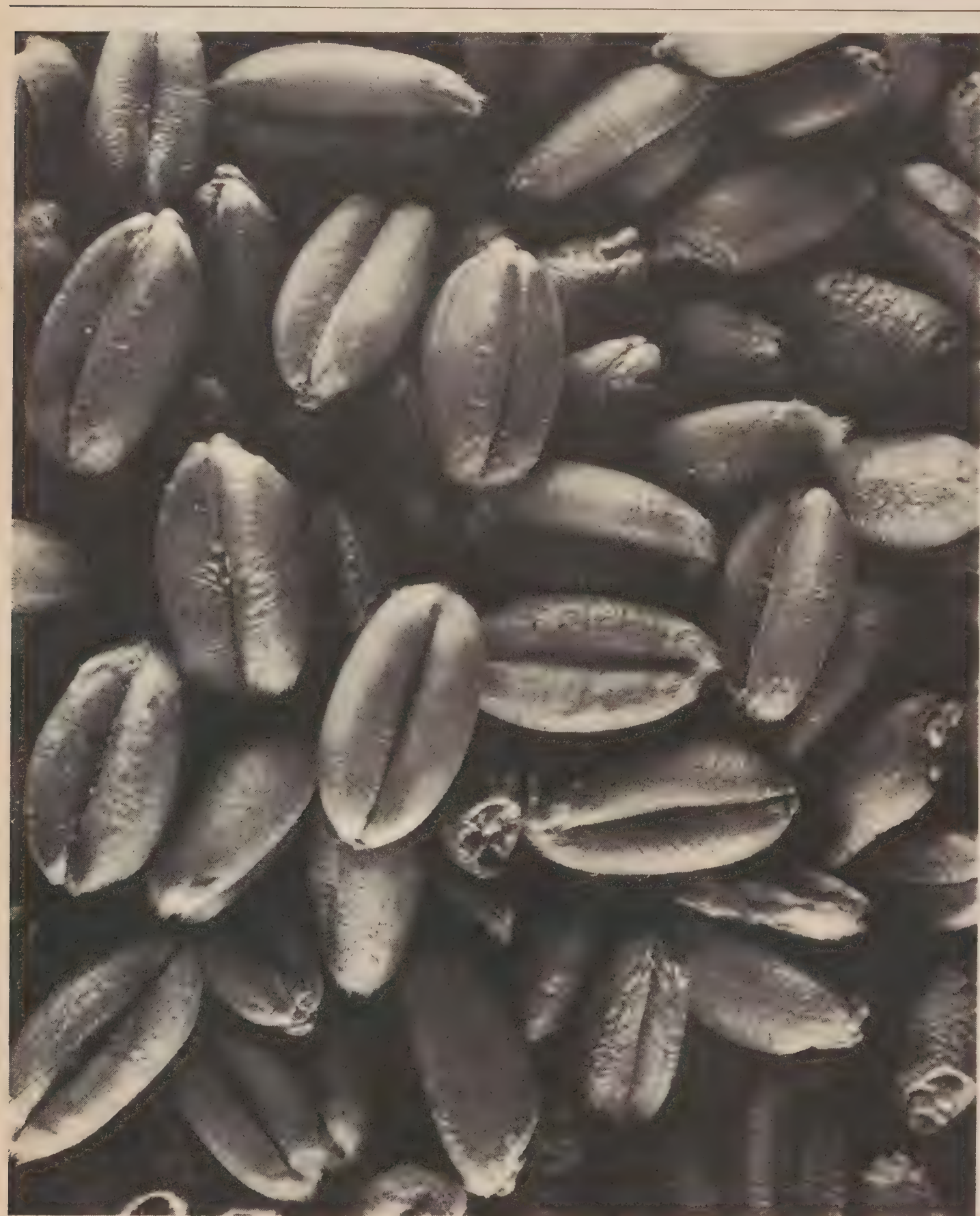
Perhaps Dan's oldest son has never heard this advice. He is now a sophomore at the University of Delaware . . . majoring in agriculture!

CORN HERBICIDES

The DuPont Company reports that the corn herbicide "Londax" will be available in commercial quantity in 1969. Offered for limited grower trials in 1968, this chemical leaves no carryover residue, and comes in both granular and wettable powder formulations.

Among the cultural practices now on the upswing is the use of herbicide combinations. One is the combination of DuPont's Lorox plus Geigy's Atrazine (the latter now called "AAtrex"). The blend is available pre-packaged from some formulators, or it can be tank-mixed by farmers.

Such combinations can offer greater effectiveness than either chemical alone . . . plus reduced residue because levels of persistent chemicals applied per acre are reduced.



just grain... no weeds

BANVEL® weed control in wheat, barley and oats out performs 2,4-D alone.

2,4-D alone just doesn't do the job best anymore. Nowadays, it's the *tough weeds* that cause trouble ...resistant weeds that are still left after spraying 2,4-D. Use Banvel alone, or in tank mix combination with 2,4-D. Apply Banvel to fall-seeded grain right after winter dormancy but before grain begins to joint. Or, to spring-seeded wheat in the 2 to 5 leaf stage. (Not for fields underseeded to legumes.) You can get almost 100% control with Banvel, so don't be satisfied with less. Banvel is translocated within weeds, killing the leaves, stems and roots of stubborn dog fennels (mayweed and chamomile), knawel, corn cockle, smartweeds, lambsquarter, Canada thistle and other major weeds in wheat and other small grains. You'll make more money with Banvel. Just one extra bushel per acre pays for Banvel, the rest is extra profit.

Get Banvel today from your dealer.

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THE GROWING WORLD OF VELSICOL

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PARLOR WITH STANCHIONS

by Bob Cudworth

"We were looking for ways to cut down on labor, so we added a double-4 pipeline milking parlor to our conventional stanchion barn. We feel we are getting better milk production in the parlor than we did with stanchions. Our herd's average is about 12,000 pounds per cow."

Paul Hahn of Callicoon Center, New York (Sullivan County) points out that with the milking parlor one man can do the milking for 53 head in 1 hour, 10 minutes. They have 67 in the milking string . . . all Holsteins but two.

He and his brother Bud (Elmer, Jr.) took over the family farm from their father Elmer, Sr. a year ago. Their grandfather had cleared the land for this 200-acre farm.

Vacation

Paul notes that he and his brother have arranged their operation so that one can take a vacation without the other being overburdened with chores.

"We planned our layout so we could clean up the barn quickly, too. By use of a high-pressure pump (300 lbs. pressure) we are able to hose down and clean the milking parlor in 10 minutes. The manure is cleaned from the holding area and stanchion area in 30 minutes by use of a blade on the front of a garden tractor that scrapes manure into a barn cleaner."

Pasture

Summer roughage feeding is largely pasture . . . supplemented with hay or silage in a bunk feeder when pasture grass quality is down. Cows go on through the barn without being stanchioned during warm weather, after moving from the holding area through the milking parlor.

In the winter, cows stay in the barn for stanchion feeding. The holding area and milking parlor were added onto the stanchion barn so the layout provides a circular traffic pattern for cows going in and out of the milking parlor.

Most of the meadows provide two cuttings and they are a mixture of clover, alfalfa, timothy, trefoil, and bromegrass.

The Hahns buy their purchased feed . . . an 18 percent protein ration . . . by the carload and store it in a 30-ton bin over the milking parlor. They feed grain at a ratio of 1 pound of grain to 3 pounds of milk, with high producers getting an extra ration of corn cob meal or hominy in the barn during the winter.

Paul reports that most of their cows are dry in the summer. Dry cattle are brought in before freshening and run through the milking parlor with the rest of the herd.

The Hahns raise all of their own herd replacements and cows are bred artificially. A sterility check is made every 4 to 6 weeks.

Paul comments, "We're quite pleased with the atmosphere in our milking parlor, although we will have to put an exhaust fan in the holding area. It gets too warm when all the cows are in there."

The wooden milking parlor has 4 inches of insulation in the side walls where the construction is of 2×4-inch, and 3 inches in the ceiling where 3×10-inch timbers were used. It is heated electrically.

"Our setup has certainly cut down on our chore time, and we are considering the use of an electric feeding cart in the stanchion barn during winter," says Paul.

Paul Hahn finds that hosing down the milking parlor is easy with the "booster" pump, in foreground, which provides 300 pounds of pressure.

One good thing leads to another

Some of your best friends are going to have a new name this year.

Like the dealer you've depended on for Armour fertilizers and pesticides...and the agronomists and crop protection specialists who have "walked the row" with you helping to spot and solve crop problems. Sometimes before they even begin.

And products like mixed fertilizers, straight materials and a full line of pesticides.

They'll all be back this year to continue to help you get the most from your growing lands.

All we're changing is the name.

And in some cases the name's the same. Brands like VERTAGREEN, BIG CROP, POWR-PRILS. The man with the new name, USS AGRI-CHEMICALS, INC., will have all of those for you too.

And you'll probably see the "Big A" around for a while yet. It's been put on a lot of things over the years.

But we'd just like you to know that everytime you see USS AGRI-CHEMICALS, INC., it's a new name for a lot of old friends . . . the people with "a world of ways to help you grow."

Armour fertilizers and pesticides from
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a Subsidiary of United States Steel Corporation
P O. Box 1685 Atlanta, Georgia 30301

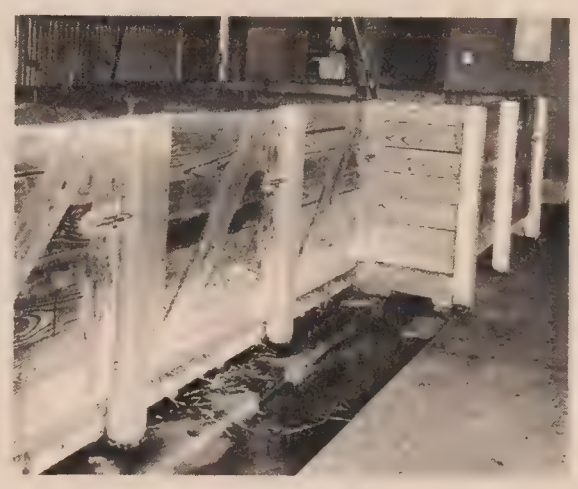
HANDY HELPS

Softer — Old auto tires with the bead cut off and the sides cut nearly to the tread every foot or so make good bumpers for livestock protection when used to cover the sharp edges of hay feeders. This is especially important when horses use such equipment.

Rugged — This heavy-duty latch is on a feedlot gate. The bolt is a heavy iron rod with a U-shaped handle welded to it. It slides in guides made by welding pipe sections to plates which are bolted to the gate. By protecting the hole in the gate post into which the bolt fits by a steel plate fastened with lag screws, the wood cannot be broken away or the hole enlarged.

* * *

Solid Posts — For short spans of fencing, two pipes set in concrete with iron rod rails beat setting corner posts and using bracing and wire or planks. Note man pass between barn and nearest post.

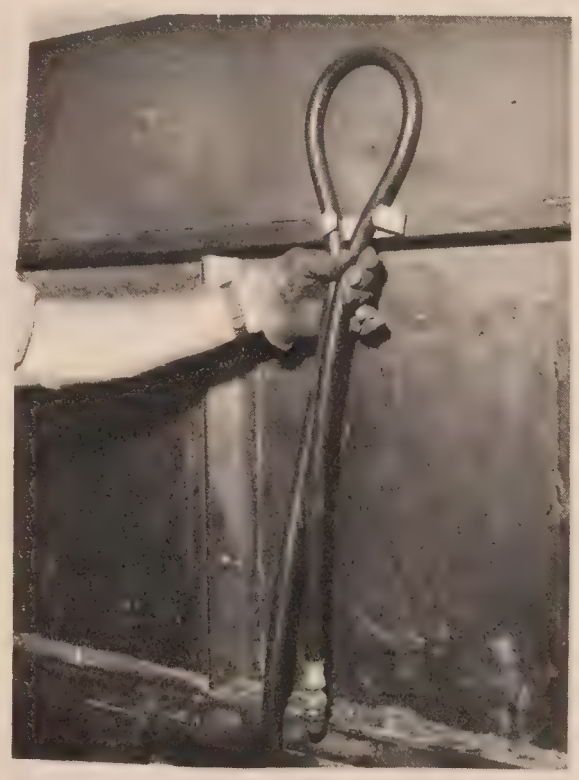


Healthy Pens — Individual calf pens are built to clear the sloping concrete floor which drains into a gutter. The pens are floored with expanded metal welded to angle iron sides, making each a removable panel. A small amount of straw is used for bedding.

Hanger — Pieces of iron pipe set in pairs on a built-up block of dimension lumber make a good barn wall hanger for shovels, pitchforks, and other long-handled tools. This one has three pairs of 1-inch pipe set in holes bored in built-up 2×4's, 2 inches apart and 15 inches between sets. The hanger is bolted through the wall and studding.

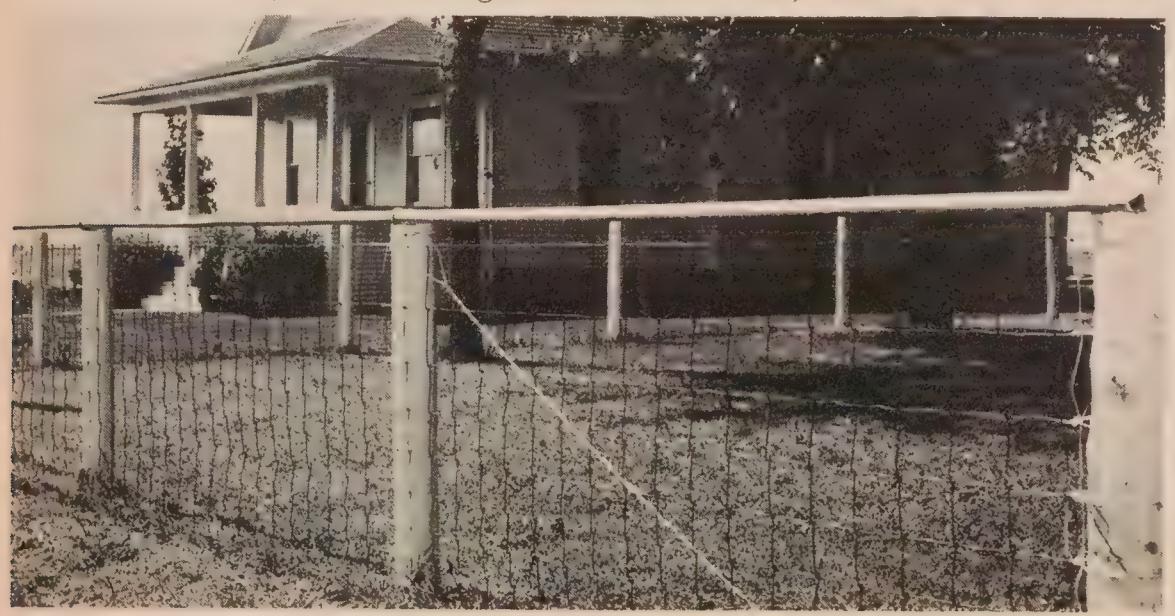
Good Anchor — A solid anchor for poles of a shed or barn where cattle will run is a sloping concrete block footing into which has been set a U-shaped clevis with matching bolt holes. By making the clevis from a piece of ½″×2″×4′ flat iron it will not break out the thin covering of concrete on the outside.

Hose Holder — The free end of the hydraulic hose is attached to this holder hooked over the front-end gate-rod of the grain wagon. It is just a thimble of iron pipe welded to a strap iron hook. A hole is drilled in the side of the thimble to take a cotter key which slides into and locks the coupler at a groove.

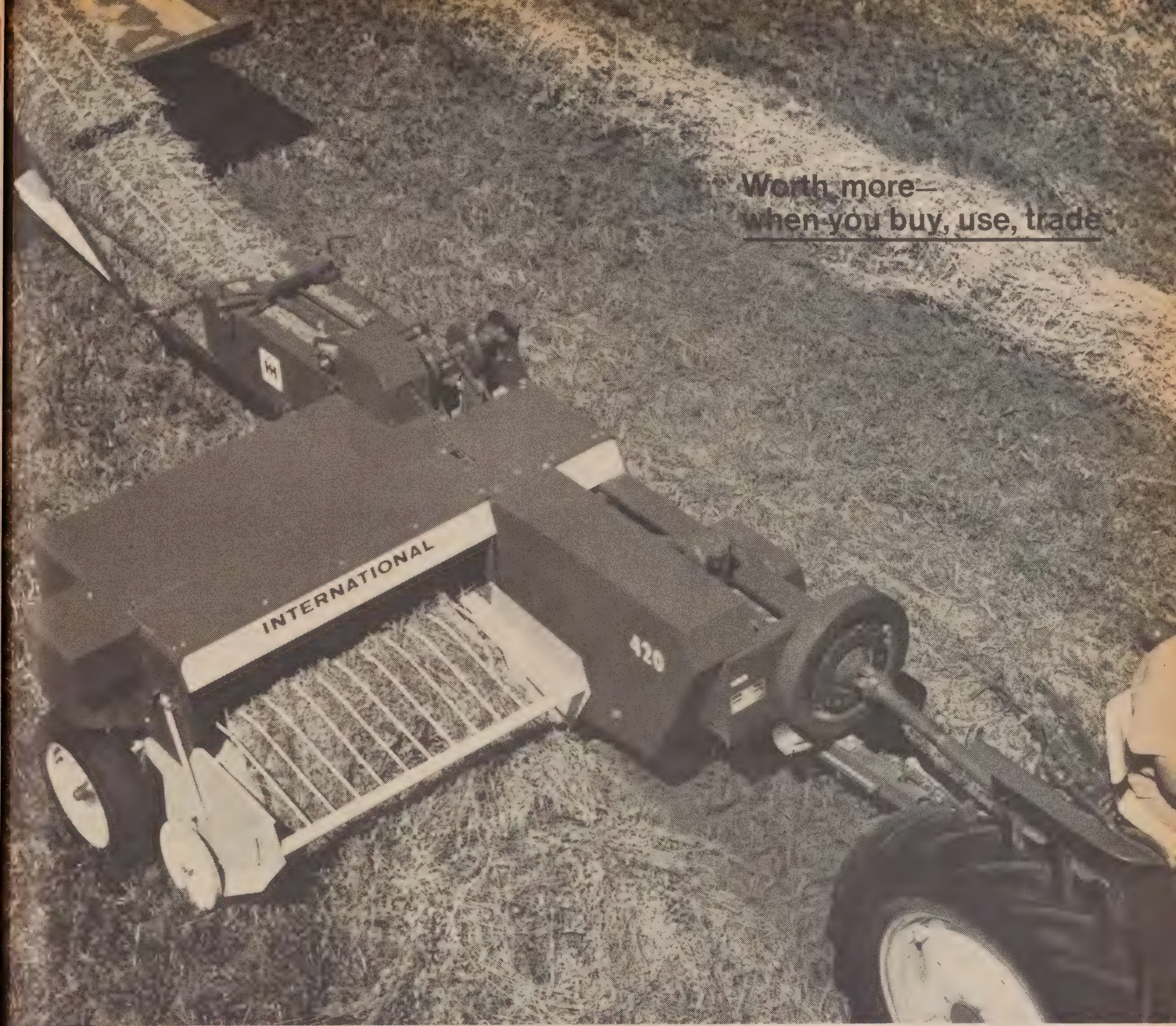


Bracket — A bracket of strap iron with the ends rounded and smooth bent C-shaped with the ends slightly out of line makes a good holder for the grain wagon hydraulic hose. The hose stays in the bracket from its own tension, but is quickly released by squeezing.

Brace — An iron pipe fastened to the top of the fence posts on short stretches (such as for a house lot) makes a good brace and does away with large, heavily-braced corner posts. Scrap pipe, painted aluminum, was used here.



Stand — A brake drum fitted with a welded telescoping pipe stand is handy for farm shop welding, or as an extra hand when sawing long boards. The rack on the post is bent from lightweight channel iron. A hand screw locks the post in position.



New International 420 baler

More capacity than ever! New International 420

Up to 15 tons per hour—all the extra capacity you'll ever need

Maybe this capacity figure sounds unusual—but the new 420 is an unusual baler. We know it will bale up to 15 tons per hour—because we've proved it in test after test, in every type of crop.

This huge capacity starts up front with the wide 55-inch pickup. Simple, fool-proof Shuttle-Glide feed has six packer fingers that sweep the feed table clean 75 times a minute. The whole husky power train and the exclusive 3-phase knotter were built for high-speed, big-job baling.

No—you won't need this huge capacity all the time. But what a difference in time saved when you do need it—in extra-heavy, bunched-up spots, in double-swath windrows and other conditions that could cause others to slow down.

And all this extra strength and capacity mean your new International baler will last longer with less downtime and fewer costly repairs.

Sound like the kind of baler you need on your place? Check and compare all the specs and facts at your International dealer. And check the flexible IHCC payment plans.

First to serve the farmer

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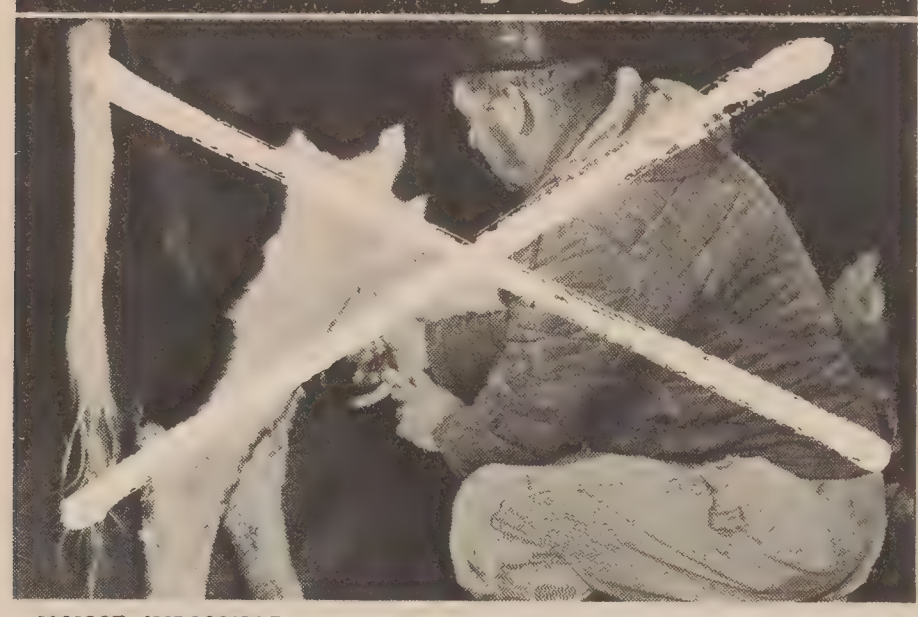
SOMATO-STAPH whole herd vaccination is the new breakthrough in *Staph. aureus* mastitis prevention. Already adopted by thousands of dairymen, the program is as simple and easy as this: 1. Inject 5cc intra-muscularly. 2. Repeat in 14 days. 3. Give a booster shot at 5-6 months. 4. Vaccinate all first calf replacement heifers at 6 months. 5. Cows may be vaccinated any time including lactation period WITHOUT WITHHOLDING MILK! Try it at Anchor's risk. If not satisfied, your Anchor dealer will refund your full purchase price.

...Sure Beats Trying To Treat It!



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• SOMATO-STAPH also available in Insta-Lode cartridges to fit our Top Hand Gun. * National average.

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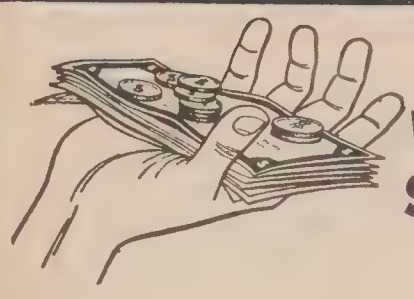

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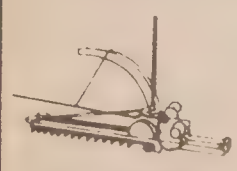
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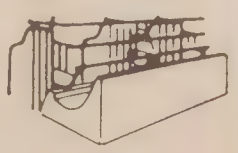

COMFORT STALL

CARBURETOR ADJUSTMENT

by Wes Thomas

GOOD fuel economy depends on several things . . . basic design of the engine, its condition, its tuning, and your skill as an operator. Some of the older, low-compression engines can't deliver as much power per gallon of fuel as the new, higher-compression versions. However, correct adjustment is necessary for any engine if you are to receive the best performance possible from it.

Economy depends upon overall condition. Compression depends upon condition of cylinder walls, piston rings, and valves. With these factors at their best, the next step is peak tuning . . . ignition, timing, and carburetion. Carburetion involves the air cleaner and adjustment of the carburetor. If the air cleaner is kept clean, the greatest opportunity for cutting fuel costs is in the intelligent adjustment of the carburetor.

Expensive laboratory-type instruments or gauges are not required for adjusting the carburetor. With a little care, you can do a satisfactory job "farm style."

Idle Adjustments—First, warm up the tractor to normal operating temperature, then move the throttle lever to the position of lowest speed. Check to see that the linkage from the governor to the carburetor is free, so that the throttle-stop screw is against the stop. Next, turn the screw in or out to give the recommended low idle speed . . . usually 350 to 450 rpm.

Without changing the throttle setting, adjust the idle-mixture screw to produce maximum idle speed. If you have a manifold-vacuum gauge, adjust the idle-mixture screw to produce the highest reading on the gauge.

If the idle speed is now greater than recommended, readjust the top screw to give the right speed. If necessary, repeat the two adjustments to finally arrive at the best settings.

To make a final check on the idle adjustments, speed up the engine, and then reduce speed to slow idle. The engine should idle smoothly, slow enough to avoid waste of fuel, but fast enough to keep the engine going. On magneto-equipped engines, keep slow-idle speed great enough to avoid tripping the impulse mechanism.

Load Adjustment—Although this adjustment is best made with the engine under load, it can be done with the engine operating at rated speed without load.

Turn the main-adjustment needle inward until the engine

The Song of the Lazy Farmer

One time when I don't go away is on Mirandy's baking day. Whene'er she lays out a pie tin and flours up her rolling pin, I cancel all my plans to roam and spend the whole day right at home. No sum of cash would make me go when my wife's got her hands in dough; for one thing, her fine artistry is something wonderful to see. Then, too, I've known no greater joy throughout my life as man or boy than sniffing odors that drift by from ovens full of apple pie; I'll bet that heaven smells the way our kitchen does on baking day.

Besides, it's fun to use my wits and give Mirandy seven fits by watching close so I can see where she hides new-baked pies from me. For years it's been a kind of game at which I have earned quite a name; but she keeps right on trying hard to catch the expert off his guard by telling me today's pies are for neighbors or a church bazaar, or else she sends me on the run so I'm not there when they are done. It makes no diff'rence, 'cause I know each hiding place where pies might go, and so by supper, as she feared, a piece or two has disappeared.

begins to lose power. Then turn it out slowly until the engine picks up speed and runs smoothly. Set the screw so that if it is turned inward engine speed drops, but if it is turned outward speed does not increase.

If the adjustment was made with no load on the engine, it may stall when a heavy drawbar load is applied. If so, open the adjusting needle just enough to provide full power when load is applied.

Since most tractor carburetors have no accelerating pump as used on automotive equipment, the tractor engine does not have comparable accelerating ability. For improved response to the suddenly-encountered loads of combines, balers, or forage harvesters, adjust the load-mixture screw for a slightly-richer mixture. However, when this extra response is no longer needed, readjust to the original setting to obtain better fuel economy.

Float Level—Fuel level in the carburetor bowl must be correct for satisfactory service. If the level is too high, the engine will use too much fuel; if the level is too low, the mixture will be lean and engine operation will be rough.

Possible causes of improper fuel level include bent or worn parts, or a stuck or leaky float.

It isn't difficult to check the fuel level in the bowl. First, check your manual, or ask your dealer what the correct level should be. Then remove the drain plug from the bottom of the carburetor and install a fitting to which you can attach a short piece of rubber tubing connected to a glass tube. Or you can use a short length of transparent plastic tubing.

Hold the free end of the tubing beside the carburetor bowl, and the gasoline in it will rise to the same level as in the bowl. The correct level may be indicated by a line cast on the side of the bowl. If not, carefully measure the distance from the fuel level to the top of the bowl, which is the machined surface on which the cover gasket is located.

If the level is not correct, you can have your dealer adjust the float, or install a new needle valve and seat if needed. If you are "mechanically inclined" you may wish to do this job yourself. If you do so, be sure to disassemble the carburetor carefully to avoid loss of any of the parts. Keep all tools and parts clean.

Since the carburetor was adjusted with the engine at normal operating temperature, the mixture will be too lean for full-load performance during engine warm-up. However, instead of changing the adjusting screw, use the choke to provide a temporary richer mixture. Then as engine temperature increases, gradually reduce the amount of choke.

ELECTRIC GARDEN TRACTOR

Living better electrically will be extended to the user of the lawn and garden tractor when a battery-powered machine, which will run from one to two hours without recharging, is introduced early in 1969.

This was announced by John D. Turrel, executive manager of the Farm Electrification Council, with headquarters in Oakbrook, Illinois, before the last winter Meeting of the American Society of Agricultural Engineers.

The driving force behind the working model to be unveiled in 1969 was the Farm Electrification Council, along with the manufacturer, Aircraft Dynamics of Lima, Ohio, and the Lead Industries Association.

The new machine will be a four-wheeled riding-type tractor, roughly equal in capability to a 12-horsepower engine type, and equipped for mowing and snow-blowing. The six 6-volt batteries are a newly-developed lead-acid type with a higher energy density than those now on the market. It has a solid state control which does not use as much energy as the resistor-type speed control.

THE SUPERFLY!

Superflies that cannot be killed by ordinary insect poison spraying have been developed in Michigan State University's laboratories. The flies are so resistant to dieldrin and DDT that these poisons can be sprayed directly on the flies without killing them. In fact, one drop of pure DDT placed directly on a superfly will not kill it.

Such a dosage is like giving 14 pounds of deadly poison to a 200-pound man!

In the laboratory, it takes about 25 generations of raising flies in insecticide environments to get superflies. At resorts, or other communities where flies are a problem, frequent spraying will also eventually cause resistant flies to develop.

That is the frightening part of attempts to control flies. Scientists are concerned about the poison-resistant insects which are developing in back yards and city alleys. The relentless struggle to keep ahead of insects goes on in the laboratories of the land.

American Agriculturist, March, 1969

10 acres, 4 hrs., 10 min. only 16.2 gallons

Dick Schmidt shows how far Hydraul-Shift can put you ahead with a 1650

Bremen, Indiana, May 7. It's Time Maker test day on the Richard Schmidt farm in St. Joseph County, Indiana. The tractor is a 1650 diesel with Hydraul-Shift—certified at 66 PTO horsepower. Behind it, four 16-inch plow bottoms. Dick Schmidt is on the starting line. At 9:14 he gets the flag.

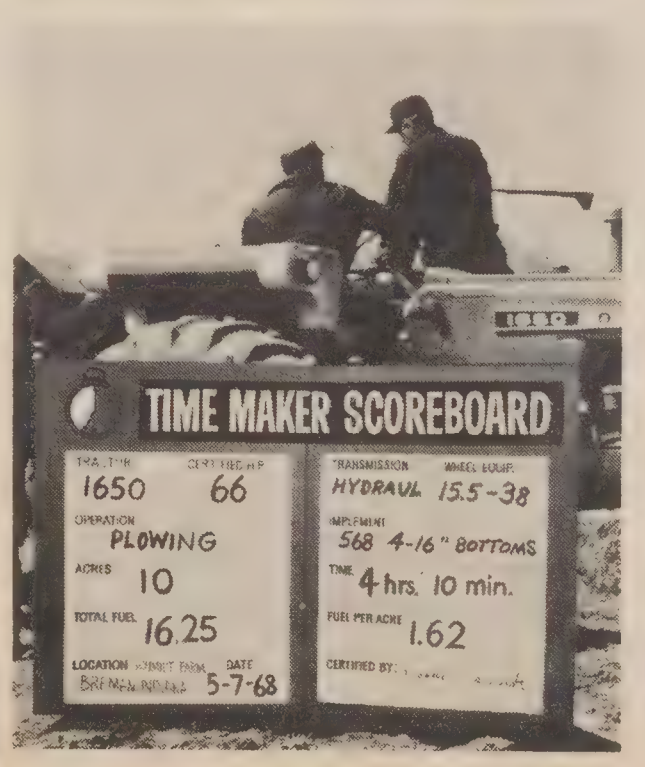
What gear? Dick is rolling in third gear, plowing 7 to 8 inches deep. With Hydraul-Shift, he changes speed without a pause to meet changing soil conditions across the field. Where the soil is sandy, he's in overdrive—5.2 mph. Normal plowing, in direct—4.3 mph. Through the gumbo spots, it's underdrive—20% more pull than direct at 3.6 mph.

Fast reset. Dick hits a rock and trips No. 2 bottom. He backs up to reset the Cushion-Action trip, lifts to clear the rock, and is rolling full speed as the plow goes back into the ground. All within 4 or 5 seconds. He'll lose less than a minute from 10 or 12 tripped bottoms.

What made the difference? What did it take to shave 50 minutes from 5 hours usual plowing time? The answer is Hydraul-Shift. And the way it harnesses full power to changing conditions with no time out for shifting. "I just kept those green horses working," Dick explains.

See what the 1650 with Hydraul-Shift can do on your farm. See your Oliver dealer. Oliver Corporation, Chicago, Illinois 60606. Subsidiary of White Motor Corporation.

1:24 p.m. The Finish. 10 acres plowed. Dick Schmidt has completed the measured acreage without leaving the tractor seat. Time, 4 hrs., 10 min. That compares with an expected 5 hrs. plowing time. And he used only 1.62 gal. of fuel per acre.



OLIVER
THE TIME MAKER

PLANT GROWING MIX

PROFESSOR Ray Sheldrake of Cornell points out that the soil used for seeds has a lot to do with the germination results. The Cornell Mix, listed below, seems to do an outstanding job for many growers. The recipe is shown on this page.

Growers are sometimes confused about the size and numbers attached to horticultural vermicute. In plant growing, the most commonly-used (sold under the trade name of Terra-Lite) is size No. 2. For most seed sowing, Professor Sheldrake's choice would be size No. 3 . . . but there has been little difference in results from Nos. 2, 3 or 4.

The peat moss used in the Mix should be good quality imported sphagnum peat moss. If lumpy, it can be shredded, or small quantities rubbed through a half-inch hardware screen.

Mixing

The material should be mixed on a clean floor or table, and care taken that the tools used to mix it are thoroughly clean. A good way to disinfect the floor and the tools is to wash them with a solution of one part Clorox and ten parts water.

Dr. Sheldrake suggests starting with the peat moss. If it is very dry, add some water (warm is best) with a sprinkling can. A wetting agent known as Aqua-Gro gives good results, using 2 ounces of the agent in ten to twenty gallons of water per yard. The biggest trouble is getting the peat moss wet, but if some water is used in making the mix it will wet much more readily in the seed sowing flats.

Dissolve Nitrate

It's also a good idea to dissolve the calcium or potassium nitrate in some of the water being used, and sprinkle it over the peat to insure better distribution. If you have difficulty in obtaining calcium or potassium nitrate, good results have been obtained by substituting ammonium nitrate.

With the peat moss spread out and wetted, it is then best to spread the vermiculite over the pile, sprinkle the limestone and superphosphate uniformly over, and commence mixing. Ideal, of course, for larger amounts, is to mix in a large rotary drum mixer if one is available.

There are two other "instant mixes" that can be used if you'd rather skip the bother of the mixing. These are Jiffy-Mix or Redi Earth. Both of them are formulated according to the Cornell Mix specifications.

RECIPE FOR CORNELL PLANT MIX

Ingredients	For 1 cu. yard	For 2 bushels
Sphagnum peat moss	11 bushels	1 bushel
Horticultural vermiculite, #2, 3 or 4	11 bushels	1 bushel
Ground Limestone	5 pounds	10 level tbsps.
Superphosphate, (20%) (powdered or granular)	2 pounds	5 level tbsps.
Calcium or Potassium Nitrate	1 pound	2 level tbsps.
Chelated iron	2 tbsps.	1 level teaspoon

A drop of Banvel controls broadleaf weeds. Cost? A drop in the bucket.

Just small amounts of Banvel per acre do the job without making corn brittle. It's a liquid and can be sprayed postemergence up to the time corn is 36 inches high *or* ten days before tassel emergence, whichever comes first. Banvel penetrates broadleaf weeds that other herbicides miss. It translocates throughout the weed...tough Canada thistle, pigweeds, smartweeds, velvetleaf, lambsquarters, spurge and others are all controlled. Corn is freed of weeds competing for plant food and moisture; it grows faster, taller, heftier. Reinfestation of land—with its subsequent losses to future crops—is slashed. When you get economical Banvel you save time, money, labor, moisture and soil nutrients. It has not been known to irritate skin. Order Banvel herbicide today. It really works great!

VELSICOL BANVEL® HERBICIDE

Velsicol Chemical Corporation • Chicago, Il 60611

VELSICOL

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HOME GARDEN FILM

"Beauty and Comfort Outdoors" is the title of a sound color film on how to eliminate undesirable insects, weeds, and plant disease with sprayers, foggers and dusters. It has just been released by the National Sprayer and Duster Association.

The film contains demonstrations and information on types and use of equipment for lawn, vegetable and flower gardens, shrubs and small trees. It also demonstrates insect control methods designed to make outdoor living a real pleasure.

Copies of the film may be ordered, at no charge, through Modern Talking Pictures, 1212 Avenue of the Americas, New York, N.Y. 10036.

SPRAYERS AND DUSTERS

Eleven small power sprayers and thirteen models of hand sprayers and dusters are illustrated and described in a new 8-page, colorful catalog available without charge from John Bean Division. Write for Brochure S-04, Dept. AA, John Bean Division, 516 Dearborn St., Tipton, Indiana 46072.

FORESTRY

Association — Empire State forest owners find much of interest in the programs of the New York Forest Owners Association. It provides a monthly publication ("Forest Owner") to all members . . . as well as carrying on a number of other activities to help woodland owners find greater profit and more enjoyment from such ownership. Regular membership is $3 annually, family membership (husband and wife) is $5.

Contact Floyd E. Carlson, College of Forestry, Syracuse, New York 13210 for more information.

Forestry Publications—"The Timber Owner and his Federal Income Tax" is the title of Agriculture Handbook 274. This 51-page publication supersedes Agriculture Handbook No. 52. Maine residents can get copies at no cost (while they last) from the Extension Service. It is also available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 for 35 cents.

The 9-page mimeo pamphlet, "Income Tax Reporting for Christmas Tree Growers" will be of interest to Christmas tree growers. Maine growers may send requests to Extension Forester, 105 Forest Resources Building, Orono, Maine.

Woodsy — The 12 northeastern states are the "Main Street of the Nation," housing 50 million people . . . about 28 percent of the American population. The Northeast . . . all 200,000 square miles of it . . . makes up 6 percent of the total area of the United States.

Yet the Northeast, the most heavily-settled region of the country is surprisingly sprinkled with 75 million acres of forested land! Stretching from the New England Uplands in Maine, through the sprawling Boston-to-Washington, D.C. Megapolis, on to the Allegheny Mountains in West Virginia, 59 percent of its total land area is covered by trees!

The Northeastern Forest Experiment Station of the U.S. Forest Service recently published "A Forest Atlas of the Northeast," full of useful information about this region. Compiled by Forester-Hydrologist Howard W. Lull, the atlas relates the story of the Northeast and her forest environs in text, tables, and maps.

This practical reference work is available without charge from: Information Services, Northeastern Forest Experiment Station, 6816 Market St., Upper Darby, Pa. 19082.

No fall tapping—Some maple sap producers have wondered whether they could increase their total sap yields by tapping their trees in the fall as well as in the spring. Temperature fluctuations like those of the normal spring tapping season occur to some extent in late fall and early winter.

The U.S. Forest Service research at Burlington, Vermont, reports that they have found that fall tapping has a detrimental effect on spring yields, and that total yields for both tappings just about equalled the spring yield. It was suggested that fall-tapped trees ran out of material sooner than those tapped in the spring.

Weeding Forests—Both liquid and pelleted herbicides applied to low-grade white oak trees are effective in killing such unwanted "weed" trees in central Pennsylvania forests, Dr. Robert D. Shipman of The Pennsylvania State University reports.

The most effective herbicide, measured in terms of total defoliation at least cost, was liquid 2,4,5-T plus 2,4-D, he reported. Although pelleted fenuron killed trees equally as well as 2,4,5-T (87 percent), the average cost per tree was five times greater with the fenuron. Bromacil pellets and liquid picloram produced 67 and 66 percent kill respectively.

However, the supply of 2,4,5-T for civilian use has been extremely limited since 1965 . . . because the military has been spraying the jungles of Vietnam with it. Therefore, substitutes have been sought . . . and research forester James Patric reports that a mixture of 2,4-D with TBA and 2,4-DP is a reasonable replacement.

For more information, contact Information Services, Northeastern Forest Experiment Station, 6816 Market Street, Upper Darby, Pa. 19082.

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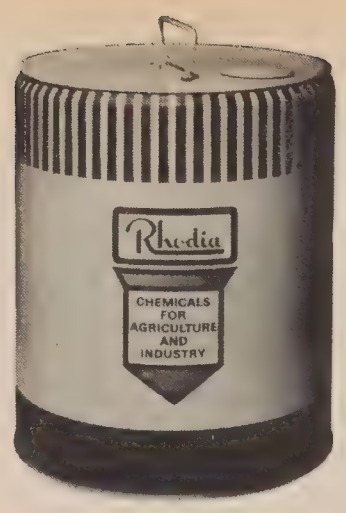

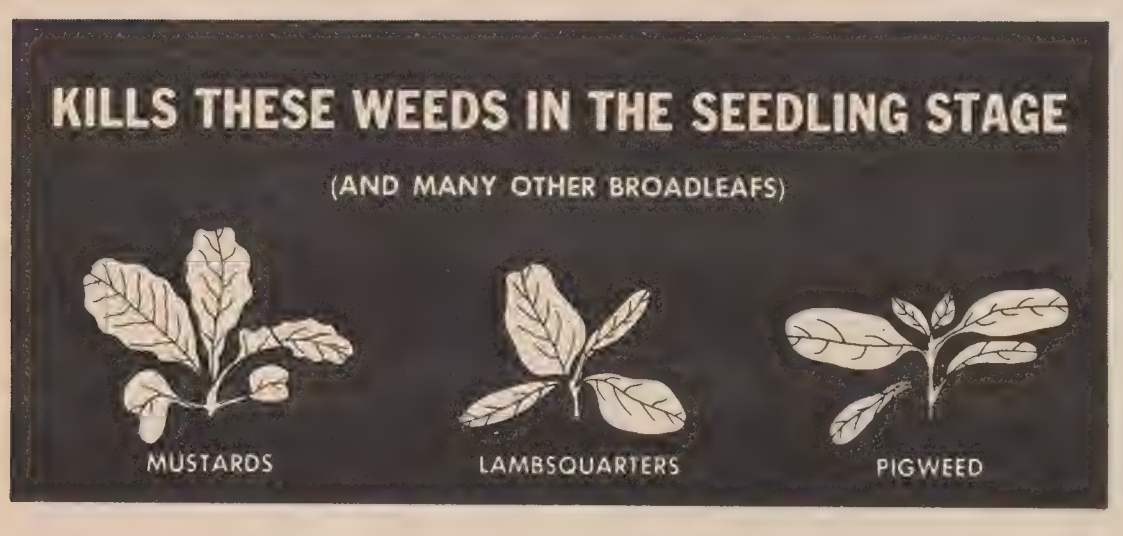

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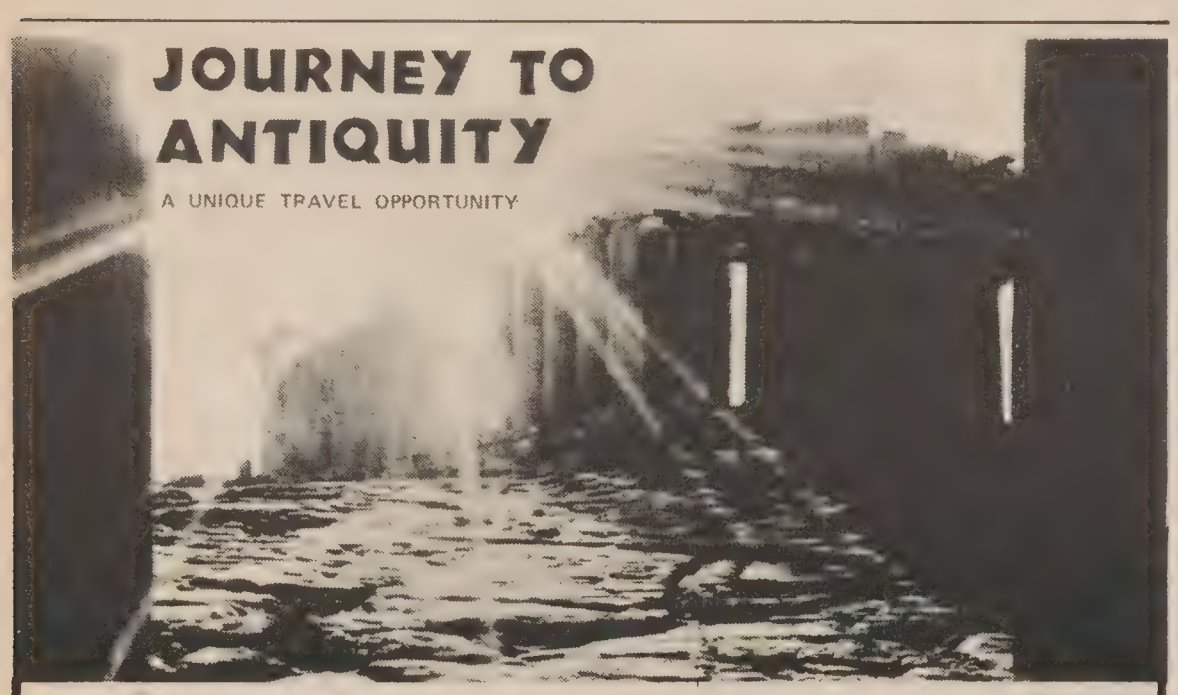

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MITEY BIG TROUBLE

THE "widow's mite" in the Good Book has made the word "mite" symbolic for smallness . . . and small indeed are the pests labeled by that name. But to apple growers, these pesky little critters can add up to **big** trouble as they swarm over trees to suck juice from leaves.

You'll note I didn't call 'em **insects,** because they really aren't. With eight legs, mites don't belong to the six-legged group technically called insects . . . in fact, the mites are more nearly related to spiders, and are often called "spider mites."

Two Troublers

In the Northeast, the European red mite is the most troublesome in apple orchards, followed far behind by the two-spotted mite. The numbers of the red variety used to peak early in the summer, and then steal into the night, but now it is a season-long problem to apple growers.

One of the reasons that mites are so troublesome is that they've never heard of "the pill," and can reproduce at a fantastic rate. Strangely, some kinds of mites don't even have to mate to be prolific . . . a female mated with a male lays eggs hatching into females, but if not mated she still lays eggs that hatch into males!

Spider mites are called "genetically plastic" organisms by entomologists . . . meaning that new races are continually being formed. Continual selection and cross-breeding lead to the formation of strains that develop growing resistance to the toxic effect of a particular chemical (or chemicals) being used to control them . . . so man must constantly change his arsenal of weapons. An experimental material, UC 34096, from Union Carbide, has performed very well in recent tests, and may prove to be the material of the future . . . for a few years.

Resistance

Kelthane did yeoman service for years as an acaracide (killer of mites), but in recent years its effectiveness has diminshed as mites in a growing number of orchards developed a stout resistance to it. Tedion has had its problems, too, in orchards where it has been used for a number of years . . . and the mites have "gotten used to it" through genetic resistance. In orchards where growers have over the years been chasing mites with phosphate insecticides, though, Tedion . . . which is not a phosphate . . . sometimes does well.

In its insecticide and fungicide recommendations for 1969, Cornell University entomologists point out that European red mite resistance to Tedion and Kelthane has reached the point where one or both of these materials are ineffective in some New York State orchards . . . the degree of ineffectiveness depending on the extent of exposure of the mite population to the material in previous years. Since these materials **can** be effective in certain situations, though, they are included in a long list of chemicals recommended for preventive or eradicative mite-control programs . . . Genite, Systox, Morestan, Acaralate, TEPP, and Moracide being some of the others.

Use Oil

Basically, the recommended approach is to use a superior oil at the "one-half-inch green" to "tight cluster" stage . . . two gallons of oil per 100 gallons of water. If applied later, use only one gallon per 100 gallons of water . . . at the "tight cluster to pink" stage of development. Mites have shown no resistance to oil, by the way.

Back in 1963, a spray material designated as "60-second viscosity superior spray oil" was introduced, and it has shown even less tendency to damage the tree than has the 70-second-viscosity oil. Both are recommended, though, and both have proved effective for red mite control.

For best results, it is recommended that the oil application be followed by an acaracide at the "pink" blossom stage. If this one-two punch doesn't do the job, then further treatment with an acaracide is required when mite numbers warrant . . . usually in late June or in July. Two applications 7 to 10 days apart are considered the most effective treatments.

Fungicides . . . those chemicals used against apple leaf diseases known as Glyodin and Karathane . . . act to suppress mite populations during the periods of their use. — *G.L.C.*

FRUIT

Display Winners—Winners of the last National Apple Week Association Retailer Display Contest included Clifford Iddings, Produce Manager of The Food Mart at Corning, New York ($150 as second prize) . . . and an Ad Man-of-the-Year award to Miss Jeanne Petti, Advertising Manager of the same supermarket. The idea is to reward the people in the food handling business who do the best job of in-store and public media promotion of apples.

Loosens Fruit—A chemical compound named Ethrel, applied to trees one to two weeks before harvest, make apples and cherries easier to pick or shake off. The product has been tested for two years at the New York State College of Agriculture, and further work will be needed to establish the best concentration and material for the various fruits, but the prospects are hopeful.

Machine Picked—Professor Ben Dominick of Cornell University reports that 10,000 tons of New York State's processing grapes were harvested by machine in 1968 (total crop 125,000 tons). "It's possible that 50 percent of the Concord grapes in the State could be harvested by machine in 1969," he reports. The grape harvester operation replaces 60 to 95 people picking by hand.

Handbook—A handbook, No. AH66, has recently been revised by the U.S. Department of Agriculture on the commercial storage of vegetables, fruits, etc. The new addition includes supplemented general material on storage temperature, humidity, and air circulation. Commodity respiration data has been added, too, as well as sections on precooling, controlled and modified atmosphere storage, and chemical treatments and fumigants. The publication is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

FOR THE BIRDS

Ideas on preventing bird damage may be found in the following publications, single copies of which may be obtained free by writing USDI, Bureau of Sport Fisheries and Wildlife, P.O. Box 150, Albany, N.Y. 12201:

1. *Protecting Corn From Blackbirds* (Wildlife Leaflet 476).
2. *Bird Control Devices — Sources of Supply* (Wildlife Leaflet 409).
3. *The Rope Firecracker* (Wildlife Leaflet 365).
4. *Vagrant Pigeon Control for the Homeowner.*
5. *Trapping Pigeons*
6. *Manufacturers of Chemical Animal Repellents* (Wildlife Leaflet 464).
7. *New York Starling Trap*

Your local Cooperative Extension Agent may also have copies.

FRUIT FACTS

Norman Childers of Rutgers University reports these research developments in fruit:

— Maryland tests show that Rome Beauty can be thinned with Sevin at concentrations ranging from dilute to 33X . . . with little variation among treatments. Adding standard insecticides to Sevin in the spray tank did not change thinning results. Sevin apparently has a wide latitude as a thinner.

— At Washington State, black polyethylene was applied to strawberries in early December and removed on March 1. It effectively protected plants during extended periods when temperatures were at zero degrees Fahrenheit, and proved superior to other treatments.

— Louisiana tests in the spring with foam from a portable generator prevented bloom and plant damage of strawberries. The foam lasted from 18 to 39 hours.

BEE CHEMICALS

Chemical substances produced by glands in the head of the queen bee control by odor many of the activities of the swarm. Research workers, including Professor Roger Morse of Cornell University, have found at least 20 separate chemical materials produced by the queen. Microchemistry appears to be the basic for the communications system among honeybees.

Presently, research efforts are trying to determine the correlation between the "queen chemicals" and the productive level of the colony. Worker bee morale seems to be conditioned by some of the odors in the hive . . . odors produced, it is believed, by the queen.

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REDDY FOR KILOWATTS

Electrical wire possibilities for the farm generally include these alternatives:

1. Type NM . . . commonly called romex . . . is the cheapest type used for indoor wiring. Suitable for dry buildings, but no good for places exposed to moisture or manure fumes.

2. NMC, sometimes called "barn wire," is covered with neoprene that resists moisture and fumes. Does good job in most any area, even if exposed to rain occasionally.

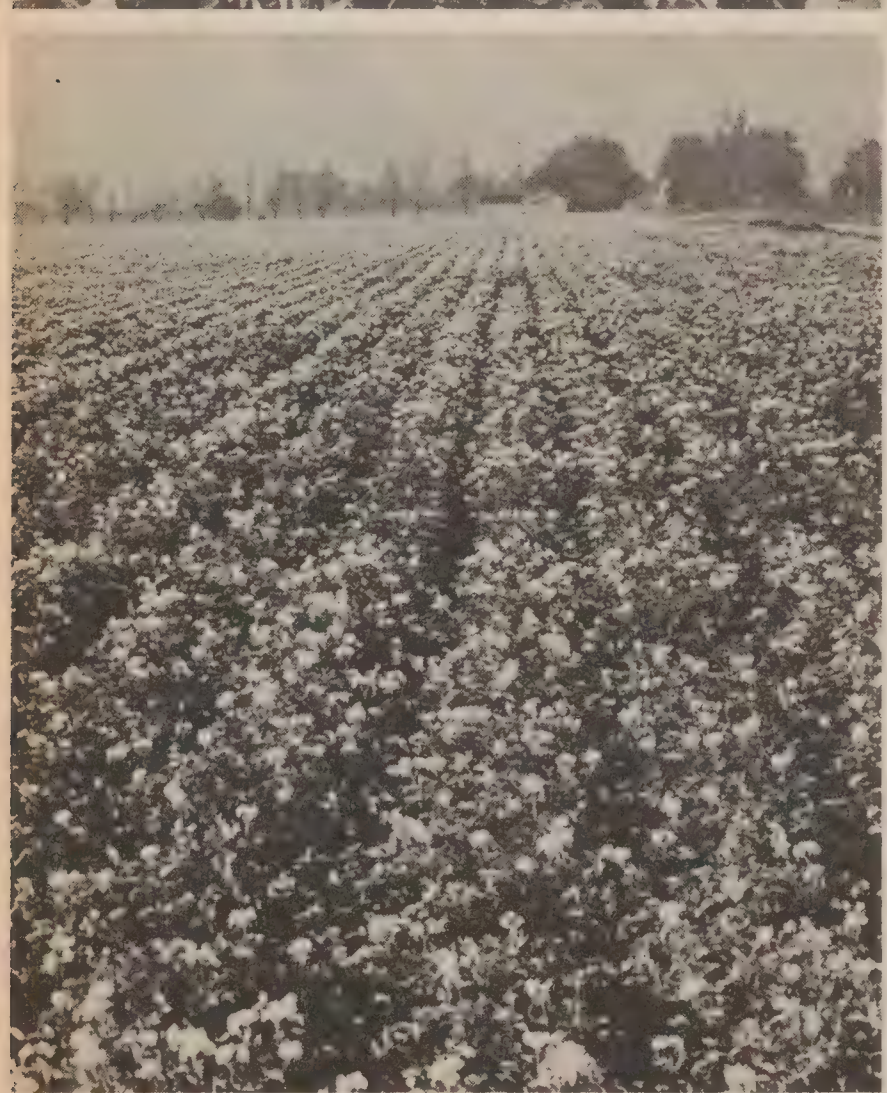
3. Conduit covering for wiring rusts easily, so should be used only in dry areas where mechanical protection is needed.

4. Armored cable (BX) is satisfactory as a factory-installed supply cord for equipment, but isn't recommended for general farm use because it's too hard to cut the flexible steel covering without damaging the insulation.

5. Underground Service Entrance (USE) and Underground Feeder (UF) are both types of cable for direct burial underground. There's also a wire for either inside or underground use, called Type UF-NMC.

Common wire sizes range from No. 14 to 0 . . . the smaller the number, the bigger the wire. All too many farms are underwired at both house and barn, and too-small wires are a major reason.

"Stray voltage" is a problem occasionally in many wiring systems . . . small enough so you may not feel it, but more than tickling to an animal's wet nose! If your cows seem to be trying to drink more, but enjoying it less, suspect they're being needled by stray voltage seeking a path to ground. This situation develops because of a poor connection of the neutral wire somewhere along the line back to the transformer . . . and a little of the "juice" is having to choose an alternative path.



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Mar. 8 - Hillsborough County (New Hampshire) 8th Annual Holstein Calf Sale, Hillsborough County Farm, Grasmere, N.H.

Mar. 14-20 - New Jersey Flower & Garden Show, National Guard Armory, Morristown, N.J.

Mar. 19-21 - 50th Annual Meeting Dairy and Food Industries Supply Association, Mountain Shadow, Scottsdale, Ariz.

Mar. 20-26 - National Garden Week.

Mar. 21-22 - 22nd National Conference on Rural Health, Philadelphia Marriott Motor Hotel, Philadelphia, Pa.

Mar. 21-22 - University of Connecticut Block & Bridle Club and Little International Livestock and Horse Show, Storrs, Conn.

Mar. 25 - Livestock Day, Conference Center, Pennsylvania State University, University Park, Pa.

Mar. 26-28 - Eastern Potato Industry Exposition, Farm Show Building, Harrisburg, Pa.

Mar. 25-26 - Fourth Annual Meeting Northeast Dairy Cooperative Federation, Inc., Randolph House, Syracuse, N.Y.

Mar. 27 - Agricultural Leaders Forum, Cornell University, Ithaca, N.Y.

Mar. 29 - New York State Hereford Sale, Cornell University, Ithaca, N.Y.

Mar. 30-Apr.1 - University of Delaware Food Distribution Conference, Newark, Del.

Mar. 31-Apr.2 - 29th Annual Meeting American Dairy Association, Pick-Congress Hotel, Chicago, Ill.

Mar. 31-Apr.4 - 18th Annual Cattle Reproduction and Artificial Insemination Short Course, University of Connecticut, Storrs, Conn.

Apr. 16 - 2nd Annual New England/Neppco Poultry Conference, Sheraton Yankee Drummer Motor Inn, near Auburn, Mass.

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SINGLE MAN for outside work. Knowledge of machinery, horses and cattle. Year-round position with room and board. Box 369-SD, Ithaca, New York 14850.

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WANTED FIRST CLASS MECHANIC, top pay and benefits. Inquire Island Motors, Washington Street, Nantucket Island, Mass. 02554.

HELP WANTED

APPRENTICE INSTRUCTORS Guide Dog Training Center for the Blind seeks young men interested in a career working with dogs. 3 year training program. Car necessary. Excellent starting salary and benefits. Write Guiding Eyes for The Blind, Granite Springs Road, Yorktown Heights, N. Y. 10598 giving educational and work background.

HOUSEKEEPER AND COMPANION for father and eight year old child, New Jersey. Box 369-SF, Ithaca, New York 14850.

WANTED MAN TO WORK in large modern kennel located in Morris County, New Jersey. Must live in. Excellent company benefits including hospital insurance, life insurance, pension plan. Private rooms and meals provided. 6 day week. For application write to Mr. David Daley, c/o The Seeing Eye, Inc. Washington Valley Road, Morristown, New Jersey 07960.

HELP WANTED. Men for outside farm work. No milking. Knowledge of farm equipment necessary. Apply Louden Hill Farm, Inc., Dimock, Penna. 18816. Phone 717-278-1149.

HELP WANTED. Manager for outside farm work on large farm. Must be experienced and have references. Good pay and benefits. Apply Louden Hill Farm, Inc., Dimock, Penna. 18816. Phone 717-278-1149.

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600 ASSORTED SWEET ONION plants with free planting guide, $3.60 postpaid. Tonco, "home of the sweet onion", Farmersville, Texas 75031.

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INVEST IN FLORIDA. 5 acres good high dry land. $50 down, $20 monthly. Total price $1895. No interest. Owner W. H. Mott, 7101—13 Street N., St. Petersburg, Florida 33702.

continued on page 55

By-Products of the GROCERY BOX

by Eileen Hasse *

IN AN ERA gone by, the farm family could house the pets, keep the boys busy, and almost furnish a home with the by-products of the grocery box. Homemakers still delight in finding new uses for colorful containers that come with the groceries, but the possibilities of new uses for old cartons have sadly diminished with the decline of barrels, boxes, and crates.

No space-age homemaker will ever discover anything as functional as grandmother's barrel chair. Wooden barrels were not hard to come by, since the grocer of yester-year received innumerable products in sturdy, clean barrels. The old-time home carpenter was a genius at sawing off the right number of staves, seat high, leaving several staves to form the back of the chair. Barrel staves at either side were sawed off at arm-rest height, and scrap lumber salvaged from a wooden grocery box was nailed in place to make the seat.

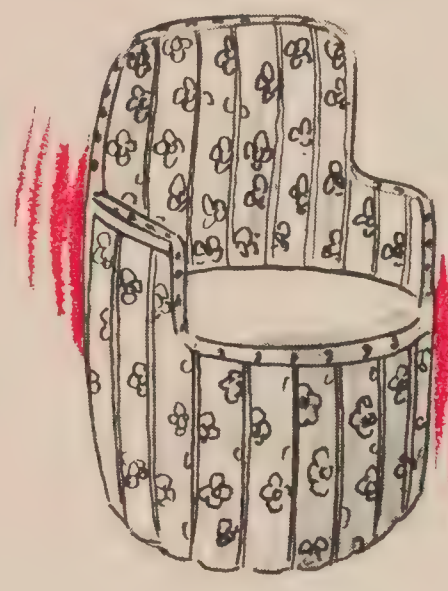
Then grandmother demonstrated her artistic ability, tacking a patchwork cover padded with excelsior and cotton batting over the barrel framework. Of course, the barrel chair was a far cry from our recliners, but it was coziness at almost no cost.

My mother made me a frilly dressing table from three orange crates that came with groceries. Two were stood on end with the third crate nailed lengthwise in between, just 6 inches lower than the tops of the upright crates. The dressing table "shelves" were lined with oilcloth applied with wallpaper paste, and the exterior was draped with ruffled cretonne, abloom with flowers that matched the bedroom walls.

Another orange crate was cut in half, padded and covered with the same raspberry colored cretonne. A cushion and flounce completed the stool for primping before the second-hand mirror. I must confess that the orange-crate dressing table was one of the possessions I hated to outgrow!

Yeast cakes used to come in dandy wooden boxes that could be had for the asking. Some folks covered them for footstools, but ours was painted with floor enamel. It was our stepstool, and I washed my first batch of dishes while standing on the yeast box so I could reach the sink.

Bananas once came to the grocer in a huge bunch, packed in a wonderful cylindrical crate that became a generous wastebasket for someone. Apple boxes were carefully dissembled to be remade into doll furniture and juvenile chairs. Wooden packing cases of all sorts were a delight to small boys with coping saws who could see possibilities for birdhouses, whatnot shelves, and letter racks. Fathers hoarded these for housing the ducklings, nestling the orphan pig, and setting a clucking hen.



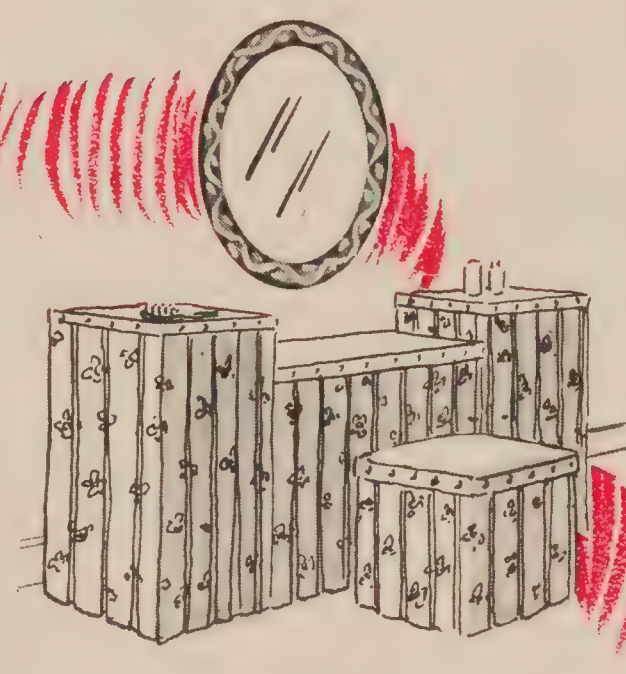
Round wooden cheese boxes yielded their golden wheels to the grocer's glass cheese case and then succumbed to the hands of dear old ladies to be padded, covered with hand-sewn scraps of plush and velvet, and placed at the feet of parlor guests. The small, slender cheese boxes were screwed to the kitchen wall and used for comb cases and spice racks.

Grocery boxes have been demoted from the substantial wooden cases that survived the ride atop the "grist" or in the Model-T. First, they shrunk to flimsy cardboard cartons reinforced with rows of twine and finally, to the fragile grocery bag. But that isn't all . . .

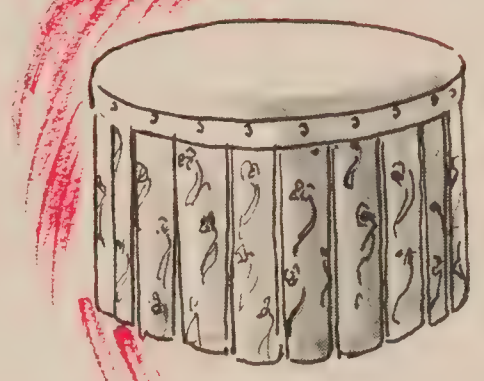
Cloth flour sacks are now almost a memory. Muslin, it seems, has yielded to paper or plastic on the grocery shelves. There are no 10-pound sugar sacks to hem for men's hankies or use for storing dried foods. Cloth salt sacks no longer save the garden seeds for next year because no one has cloth salt sacks. Neither does anyone save seeds.

Modern little girls will never know concern about the "Pillsbury's Best XXX" that refused to fade from the homemade undies of a generation past, in spite of many launderings in lye soap and kerosene. Ladies seeking material for "cross-stitched curtains" or "lazy-daisy dresser scarves" must scan the shops for costly yardage instead of raiding the family sack supply.

Tin lard pails have been replaced by pastel plastic which could never become an indestructible school lunch bucket, if lunch buckets were not outmoded. Syrup and sorghum have taken to glass bottles and jars. If, perchance, you do find a gallon pail of syrup, there is no handle to make it safe for berry picking on the back forty.



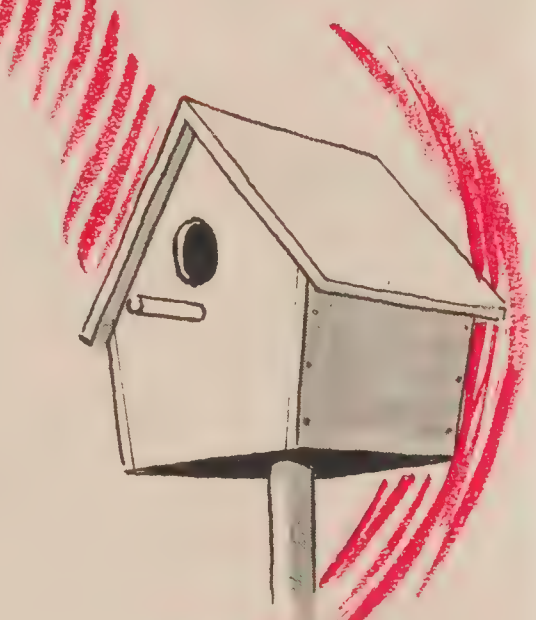
It doesn't end with buckets, boxes, and barrels either. Even grandma's ball of string has disappeared. The stapler, self-sealing tape, and sophisticated cartons have done away with the last of the great string savers. The yards of unglazed brown paper that were so useful around home are no more. Today, the homemaker buys waxed paper on which to cool the cookies, plastic-coated paper to cover the shelves, and her own apron pattern, instead of using wrapping paper to copy her neighbor's.



Items that once found their way home free with the groceries are now purchased products. Not so long ago, a self-respecting homemaker seldom bought a loaf of bread. But when she did, she got triple value — wrappings for the school sandwiches, a polisher for her stove, and a liner for the jelly roll pan.

The grocery box was once an occasion, an education, and an occupation. But cartons come and go! No one would trade the pliable plastic bag of brown sugar for the brown paper bag that became rock-hard unless it was stored in the bread box. Few of us would put up with a soggy bag of cracked eggs, now that uncrushable cartons are in. Most of us like our pickeled herring in sealed glass jars, rather than scooped from a barrel into a leaky cardboard "boat."

Strangely, there are some things that remain unchanged. The salt box still sports the "pour top," but has absolutely no place to return salt easily to the box. The cinnamon can still refuses to receive a measuring spoon (too thick) or a teaspoon (a mite too wide for the slot). The space-age cook still shakes the cinnamon from the can, or the salt into the spoon, hoping to get just the right amount, or else?



Atomic scientists have not concerned themselves with frustrations of the grocery box to the bifocal set. Deliberately, they design no two boxes to open alike. I suspect a sneer on the faces of the industrialists who print "tear on dotted line" or "open here" and then dare you!

Never in history has our food been so well protected. Things are inspected, double-sealed, and triple-coated. Supplies are premeasured, pre-packaged, and precooked. Packages are costly, but so pretty.

Men, women, and children still take pride in the by-products of the grocery box. There are dainty cottage cheese cartons, foil baking containers, egg cartons to dissect for doll hats, and paper bags for make-believe masks. The grocery box still offers family fun in box-top offers, creative uses for plastic jugs, and the assembly of an airplane from the cereal box. The grocery box has changed, but the thrill is the same. The challenge of new uses for old containers will always go on!

* Loganville, Wis.

VISITING

with

Home Editor Augusta Chapman

Kitchen Cabinet Standards

If you are planning to build a new home or to remodel your kitchen, the following information will be helpful to you. Kitchen cabinet manufacturers have banded together to set up standards of excellence for cabinet construction and finishes.

Companies who submit their brands to the National Kitchen Cabinet Association for testing and then pass the tests are permitted to use the blue and white Certified Cabinet Seal issued by the Association. Look for the seal on the inside of doors and drawers. It warrants that the individual cabinet maker has conformed to the standards of excellence adopted by the NKCA.

Many of the tests, of course, determine the all-important structural strength, capacity and workmanship of cabinet units. Other tests analyze the durability and appropriateness of finishes. The tests are identical for each cabinet brand submitted and cover all types—steel, natural wood, or laminated finishes. Also included in the program is provision for annual spot checks of products to maintain quality performance.

Last fall when the National Farm Home Editors met in St. Louis, James L. Dooley, Administrator for the Standards and Certification Program of the National Kitchen Cabinet Association explained the program to us. He said the tests were developed over a three-year period and are administered by qualified independent laboratories. At that time, 34 top cabinet manufacturers had earned the right to attach the Certified Cabinet Seal to their merchandise.

Booklets To Send For

Let's Bake (The Robin Hood 'No-Sift' Way), 1969 Edition. A 72-page recipe booklet which includes a section devoted to the carefree Cool Rise method of yeast baking. Send 35 cents in coin to **Rita Martin Kitchens, International Milling, 1200 Investors Bldg., Minneapolis, Minn. 55402.**

* * *

You might like to send for "**A Primer of Home Laundry Planning,**" published by the Maytag Company. The 16-page booklet discusses locations in the home, selection of appliances, storage and work space, along with tips on how to plan a really attractive, workable home laundry.

The booklet is available free of charge by writing to: **Primer, Consumer Information Center, The Maytag Company, Newton, Iowa 50208.**

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by Roy Z. Kemp

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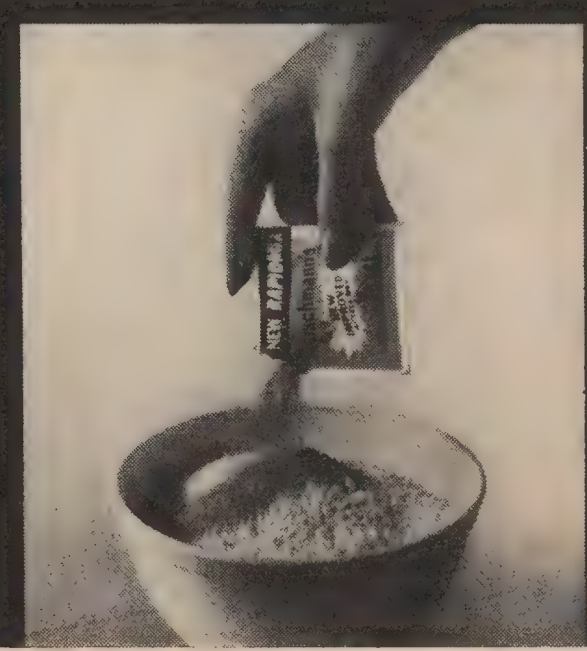

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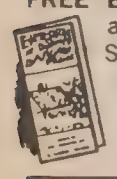

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Photo: National Broiler Council

Chicken Breasts with Pilaf, garnished with pretty frosted grapes, will inspire you to get out your best silver and china. And the best part—it's easy to make!

GOURMET EATING with Chicken Breasts

by Alberta Shackelton

Breasts from the broiler-type bird are highly prized portions of chicken and are ideal for a variety of main dishes, from very simple to the elegant, also for the use of a wide range of tasty sauces. When halved, each portion or filet is known as a "supreme."

Boned breasts are easier to eat and serve. They may be skinned and boned before cooking, or the breasts may be cooked first, even a day ahead. Here's an easy way to do this: Pound whole or half breasts to flatten slightly. Arrange in single layer in baking pan. Pour melted butter over chicken and sprinkle lightly with salt and pepper. Add ½ to 1 cup water or chicken broth (canned is fine) to pan, cover pan tightly with foil, and bake in a quick moderate oven (375°) about 45 minutes or until breasts are tender. Uncover and cool in the broth to keep moist. The skin can then be pulled from the meat and the meat easily taken from the bones in large pieces. Use broth for the sauce.

If you wish to have breasts skinned and boned before cooking, your meat man may be willing to do this for you. Or, why not try your hand at boning, using a small, sharp, thin-bladed knife.

To Bone Chicken Breasts—place chicken, skin side down, on a cutting board. Split inside surface down the middle by making an incision with point of knife about half way back from neck end and moving point firmly away from the neck. With fingers pull two sides of breast gently in opposite directions (back center bone will come out easily) and pull out the two sections of bone.

Starting at the center and working on one side at a time, insert knife blade just under the rib bones and carefully scrape bones free of the flesh, pulling up bones as you proceed. When you reach the outer edge of breast, the bones may be easily detached. Then scrape away flesh from wishbone and the neck and remove in the same way. Halve boned breast lengthwise if desired. Bones and skin may be used for stock.

CHICKEN BREASTS WITH PILAF

4 uncooked whole chicken breasts
Salt and pepper
½ cup butter
½ teaspoon tarragon
¼ teaspoon thyme
2 tablespoons flour
1¼ cups chicken broth

Halve chicken breasts and sprinkle with salt and pepper. Melt butter and stir in herbs (use your own favorites if you wish). Add chicken breasts and brown on both sides, about 25 to 30 minutes or until tender. Remove chicken breasts and keep warm. To prepare sauce, blend flour in pan drippings; stir in broth and cook with stirring until mixture thickens and comes to a boil.

To serve, mound Pilaf in center of serving platter and arrange chicken breasts around Pilaf. Garnish as desired—frosted grapes or mandarin oranges and avocado slices are attractive. Serve with sauce. To frost grapes, dip small clusters of seedless grapes into unbeaten egg white and shake to remove excess. Roll in granulated sugar and chill in refrigerator.

PILAF

4 tablespoons butter
½ cup slivered almonds

(Continued on next page)

1 can (6 ounces) sliced mushrooms
1½ cups diced celery
3 chicken bouillon cubes
½ teaspoon salt
1½ cups uncooked rice.

Melt butter in a large heavy saucepan or skillet. Add almonds and cook until lightly browned. Drain mushrooms; add enough water to mushroom liquid to make 3 cups. Add to skillet with celery, bouillon cubes and salt; bring to boil. Add rice slowly. Cover, reduce heat and simmer 14 minutes. Fluff with fork and add mushrooms. Cover and let stand 10 minutes.

EASY BREAST OF CHICKEN EUGENIE

4 cooked whole chicken breasts, boned, split and skinned
8 thin slices hot ham, baked, fried or broiled
8 slices toast, crusts trimmed
2 cans condensed cream of chicken or mushroom soup
1 can half-and-half or ¾ cup thin cream sauce, approx.
1 cup sauteed fresh or canned mushroom slices
½ cup toasted almond slivers.

Place toast slices on oven-proof serving platter. Place a ham slice on each piece and top with half a chicken breast. Combine soups with just enough half-and-half or thin cream sauce to make a sauce of thin to medium consistency. Add mushrooms and heat, stirring occasionally. Cover each serving with sauce and sprinkle with almond slivers. Place in a moderate oven (350°) just long enough to heat through, 15 to 20 minutes. Serves 8.

CHICKEN BREASTS BAKED WITH SOUR CREAM

3 uncooked chicken breasts, halved
4 tablespoons butter
1 small onion, minced
3 tablespoons flour
1 cup water
1 cup thick sour cream
1 teaspoon paprika
Salt and pepper to taste
2 tablespoons chopped parsley

Brown chicken breasts on both sides slowly in hot butter. Transfer to casserole in single layer, bony side down. Saute the minced onion lightly in the skillet drippings. Blend in flour until smooth and stir in water and sour cream. Cook with stirring until mixture thickens.

Pour gravy over chicken. Cover and bake in a moderate oven (350°) about 1 hour or until chicken is tender. Place chicken breasts on hot platter. Stir parsley into gravy and pour over chicken or serve separately to 6.

Former AA Editor Cooks

Chicken Divan is a dish popular among gourmet cooks. Recently I enjoyed this at a luncheon prepared by Hugh Cosline. I asked him to share his cooking interests with our readers, and here is his story:

Keeping busy after you retire is supposed to be a problem. It may be for some people but not to me! In the summer I garden, while in the winter I play bridge and cook a little.

Recently, in a moment of weakness, I agreed to cook for a party my good wife was putting on for eight including herself. Actually, the biggest problem I had was keeping her out of the kitchen! Then to add to my troubles, one of the guests wanted me to tell how I did it. So here goes!

I consented mostly because I thought some of you might enjoy a similar experience. But let me explain right at the start that this isn't the "fry an egg and make a piece of toast" kind of cooking. Don't try it unless you are willing to take a little time and do a little "fussing." It's recommended only if you want to put on a stag party or treat your wife to a home-cooked meal on Mother's Day or her birthday.

Chicken Divan was the main dish, and to get things started, you need three chicken breasts and two 10-ounce packages of frozen broccoli. You cook them separately, the chicken for about 15 minutes if you are lucky enough to have a pressure cooker, which I recommend, and the broccoli for about 3 or 4 minutes.

Next, you spread the broccoli in the bottom of a baking dish, about 7″×11″×1½″ (pyrex is good). Then you take all the bones from the chicken and put it on top of the broccoli. I should mention that this recipe makes 6 good servings. You can stretch it to 8 if you are ready to take the chance of being called "close or stingy." To be sure, I doubled the recipe!

Now you have a good start. The next operation is to mix the following: two cans of condensed chicken soup, a cup of mayonnaise, a teaspoon of lemon juice, and a half-teaspoon of curry powder. This mixture is poured over the chicken and broccoli. Then on top you sprinkle a half cup of shredded, sharp cheese and a half cup of soft bread crumbs, to which you have added a tablespoon of melted butter.

All this is baked in an oven for 25 to 30 minutes at 350 degrees. I figure that the person who first mixed all these ingredients together had a lot of courage, but it really turns into a readily eatable conglomeration. In fact, the ladies at the party were quite enthusiastic.

Naturally we wanted to furnish some trimmings, but here I became lazy and took the easy road. For a salad, I started with a head of lettuce, added some chopped celery, and anointed it liberally with Italian salad dressing. If I had been making it for myself, I would have added some chopped onion. But to give it a little spice I put in a handful of croutettes and a sprinkling of salad condiments. Then I decorated the salad with some slices of tomato, and it was all ready.

The rolls were "brown and serve," so all I had to do was pop them into the oven for the prescribed time. The dessert was also easy—ice cream topped with strawberries.

This was fun for me because I like to cook. If you share my enthusiasm, try it sometime. If you have other hobbies, perhaps you can persuade the better half to give this recipe a try.

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continued on page 57

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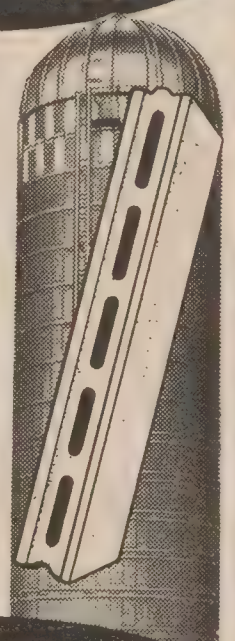

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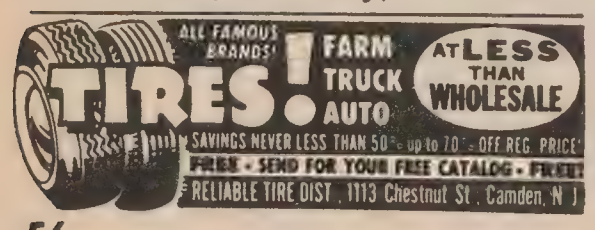

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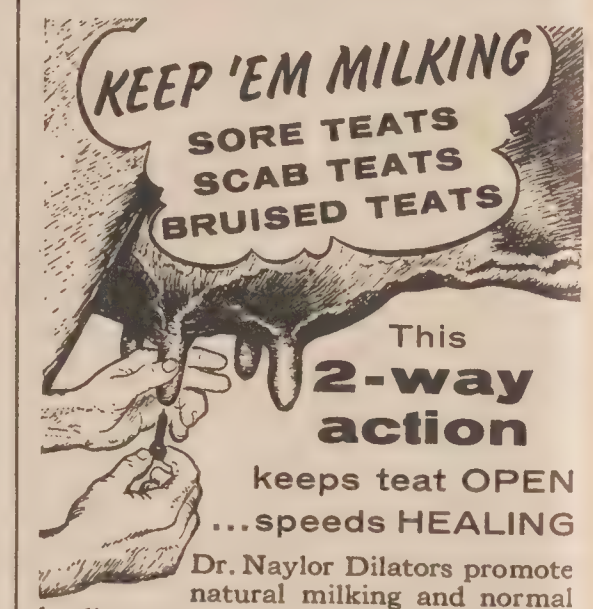

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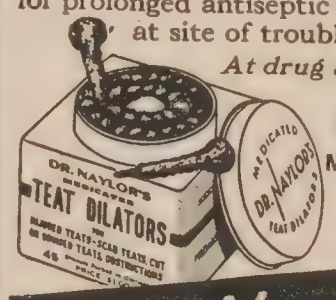

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BEGIN GARDENING

by Nenetzin R. White

Assuming that by now you have drooled over all the new nursery and seed catalogs, you must be in the mood to "do something." With a bit of planning right now, you can really save a lot of work later on and add immeasurably to the fun and pleasure derived from your garden. Perhaps the following suggestions may satisfy that urge to do something.

Things To Do Indoors

Bring in branches of forsythia, Japanese Quince, peach, pussy willow, and apple for forcing. Try to collect these on a day when it's above freezing. Put them on a cool window sill and keep from the drying heat of radiators. The more sun they get, the better color they'll have. Just for fun, I often cut a few 8 to 10-inch "branchy" branches of our Golden Weeping Willow. They make wonderful baby weeping willows in nothing flat, and children in particular enjoy the wonderment of opening leaves and flowers.

Start seeds now of petunias, verbenas, snaps, dahlias, asters, lobelia, stocks, nemesia, tomatoes and peppers. Also, most perennial seeds may be planted now indoors. An excellent starting mixture is ⅓ loam, ⅓ palite, and ⅓ peat moss or vermiculite. To sterilize, saturate the mixture with water, even to the point of covering it, and put in an oven of 212 degrees or more for an hour. You'll have a steam-sterilized soil, all set to go.

Check your stored glads, cannas or dahlias. If you find any rotted ones, heave them out **fast.** If you haven't put chlordane on your glads to prevent thrips this summer, do so now. A tablespoon of it in a big 10 or 15-pound grocery bag will treat a dozen or so corms. Shake them up as if you were sugaring doughnuts. Glads, of course, we store dry in open flats. The others should be in barely damp peat, sawdust or such. If dahlias or cannas appear too dry, add a very small amount of water to the storage medium. Remember that you are trying to keep them in the same condition they were when you put them in storage.

Check For "Heaving"—On the next bright day when it has thawed a bit, get out and look over your ground covers, perennials, and even any newly-planted roses, shrubs or evergreens to check for frost "heaving." If you find plants with their crowns way up off the surface and their roots exposed, push them back as gently as you can. In severe cases, a plant may be flat on the surface, roots and all.

This heaving is a rather complicated physical phenomenon caused by alternate freezing and thawing. It is usually most damaging in wet and clay-type soils and is responsible for the death of many plants. It can also cause serious loss to a farmer on winter wheat and such.

Obviously, the less freeze and thaw, the less heaving. This year, fortunately, we've had better-than-average snow cover and fairly consistent temperatures, both of which help prevent heaving. However, the coming of March and April brings rapid temperature changes, lack of snow cover, and bad trouble.

Since only the top 6 to 8 inches of soil is affected, only the smaller plants or newly-moved ones are usually damaged. If you mulched well last fall, chances are you won't have this problem. If you forgot and now find tender roots on the surface, apply a mulch as soon as possible and wait until the ground is thoroughly thawed before attempting to re-plant. The surface may be thawed but the ground frozen solid an inch or two below; you would do more harm than good by attempting to re-plant.

Rabbits—On a bright moonlight night, one single rabbit can cause complete havoc to your plantings. In particular, they like all young fruit trees. flowering crabs, dogwoods, viburnum, spirea, and euonymus. Better check at your earliest opportunity to see if damage has been done. If there is none, by all means wrap the above plants with tree wrap, aluminum foil, burlap or such.

Euonymus ground cover can be protected with mesh chicken wire just laid over the surface. Remember, too, that a rabbit can reach several feet up a tree when standing on a couple feet of snow.

Commercial sprays are available too which act as repellants. If damage has been done, cover the wounds at once with a good tree paint and prune the plant back heavily to compensate for lost circulation due to bark removal. If the tree has been completely girdled, its chances for survival are almost nil.

Pruning And Bleeding—Because your shrubs and trees are dormant and void of leaves right now, you can easily see their branch structure. This is an ideal time to remove excess "water sprouts" from fruit trees and to thin out the overgrown wood from lilacs, mock oranges, honeysuckle, and such. Take the bigger, older wood clear off to ground level and open the plant up for better bloom and freer air circulation.

Contrary to popular belief, a bleeding wound (although it bothers you to see it) is not harm-

(Continued on page 61)

Journey To Day Before Yesterday

By E. R. Eastman

Memory has a happy trick of remembering the good times and forgetting the bad. Readers write in constantly telling how "they have lived and done so many things described in this book," and what fun it is to recall many events that they themselves had almost forgotten.

For a copy of this nostalgic book, well-bound and illustrated, send check or money order for $7.30 (New York State tax included) to American Agriculturist, Book Department, Box 370, Ithaca, New York 14850.

(Continued from page 55)

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Dollar Guide

For The Northeast Farmer

BLEND PRICES for milk in the New York-New Jersey market are estimated by Northeast's economist Chet Smith as: March, $5.40 per cwt.; April, $5.21; May, $5.00; June, $4.98 ... an average of $5.31 for the first six months of '69, which is 33 cents per cwt. above same period in '68.

BECAUSE the Federal Intermediate Credit Banks and the Bank for Cooperatives now own all stock (no government capital) the Banks will be able to loan $750,000 more money than last year to U.S. farmers. Interest rate on loans to farmers are unlikely to be lower in the near future.

COLLEGE TESTS show that corn early enough to produce mature ears in your area is the best variety for silage. A variety with a later-maturing date will grow more tonnage which is mostly water. Dry matter per acre is likely to be the same or less, so why harvest water?

AS DAIRY HERDS increase in size, and as more corn silage is used, feeding practices need to be changed. One problem is to get high producers to eat enough grain. Often there is insufficient time during milking, but one answer is free choice feeding of extra grain.

Another way is to divide the herd into two or more groups according to production, and feed accordingly.

Also, corn silage is high in energy, but low in protein. One practice to follow is to add urea to the silage.

Of prime importance is careful study of the herd, to provide the feed for high production and health. The higher the milk production, the more complicated the feeding program.

ON A RECENT TRIP we noticed two conventional hip roof cow barns under construction. The trend is to bigger dairies, and free stall housing. However, it's worth noting that cows can be kept in stanchions in a pole-type barn. With most of our hay now baled or put in the silo, perhaps you should think twice before you build a hip roof dairy barn.

MAPLE SAP is often sold by tree owners to someone else making sirup ... and priced according to sugar content as read on a "Brix" scale. Average price for delivered sap is 5 cents per gallon.

EGG PRODUCTION TESTS in U.S. and Canada are reported in ARS 44-79-9. Provides information on performance of various strains of birds. Available through your poultry Extension agent, or write Agricultural Research Service, USDA, Beltsville, Maryland 20705.

WHERE IS AGRICULTURE GOING? This is the theme of the Agricultural Leaders Forum at Cornell University on March 27 ... beginning at 10 a.m. at Alice Statler Auditorium.

MARCH 21 marks end of sign-up period for participation in the 1969 Feed Grain Program. Check with your local ASCS people for details.

TRACTOR SAFETY is purpose of House Bill 680, introduced by New York Congressman Sam Stratton. It would require that rollbars and seat belts be installed on farm tractors. Passage believed having only a remote chance, but some kind of tractor safety legislation likely to pass in future years.

USDA REPORT shows cattle on feed to be up 10 percent compared to a year earlier ... the largest year-to-year increase since 1963.

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Food For The Spirit

by Robert Clingan

SIXTY MILES ABOVE THE MOON

No matter what unfolds in the future, none of us will ever forget the days in 1968 when man really entered the space age. We now know we are minute forms of life on a small space capsule called Earth.

As we remember back, we were hopeful for success of the "moon orbit" by a man-created capsule, fearful of its failure, and of tragic disaster for its intrepid volunteers. On Christmas Eve we were told we would hear their voices from sixty miles above the surface of the moon. And so we listened. What did we hear? We heard them take turns reading the first ten verses from the first chapter of the book of Genesis of our Bible.

Why did the astronauts of Apollo 8 read the Bible from the moon? I believe it was because these three men were first of all sincere, devout, religious men who assumed Christian responsibilities in their communities, and nourished the growth of their faith by attending the churches of their choice. Two were active Episcopalians, one a devout Catholic. Captain Frank Borman is a lay reader who occasionally helps lead a Sunday morning worship service.

Another reason is that, when viewing the rocklike, lifeless surface of the moon, the astronauts must have visualized the surface of the earth on one of its earlier days. This was exactly my feeling one time when I crossed the mountain ranges between the coastal region of Southern California near San Diego, and descended the rocky slopes and ledges to the desert below.

This is how it must have been in the early days of earth's creation. Only the poetic imagery and spiritual insights of the Bible can begin to communicate this experience and its depth of understanding.

Contrast the experience of men of faith who penetrate space with the atheistic Russian astronaut who said, "I penetrated space and I did not see either God or heaven; neither one can be found out there." These men of ours went much farther and saw a great deal more. Why? Because they had "the eyes of faith." Although they are tough-minded, highly-selected, disciplined men of science, they found the story of the creation as recorded in the Bible still relevant . . . and the most significant message they could return from moon to earth even on Christmas Eve.

"In the beginning, God created the heavens and the earth . . . and God saw that it was good."

BY THE DOOR

Jane gave a puzzled look that day
As she came through the door.
Her large blue eyes had spied a pair
Of old shoes on the floor.

I knew what she was thinking
As I shook hands with her beau,
For that same sight had met my eyes
Some sixty years ago.

For many years this old farmhouse,
Down by these fertile fields,
Protected all a-living here:
The lands brought forth fine yields.

Hewn beams showed from the ceiling,
Wide boards comprised the floor,
And always an old pair of shoes
Stood by the kitchen door.

When John and I were married
And came down here to stay,
Grandma said that this fine house
Would come to me some day.

I was a very happy girl.
This home I did adore!
Explained to John when the time comes
No shoes beside the door!

Gramp slipped away one Christmas Day,
Went home to his reward;
His old shoes now had been replaced,
John's stood there on the board.

Two years later Grandma passed;
She was just eighty-four;
And, Friends, the pattern had not changed
. . . Still work shoes by the door!

Shoes scuffed, and worn, and out of shape
From days of heavy toil.
I didn't mind the dirt brought in,
Thanked God for rich farm soil!

How beautiful our Janey looked
On wedding day in June!
Jim, her husband, strong and tall
Would run the farm real soon.

Now that my John was called on home,
And Janey lives next door,
How strange it is to look and see
No shoes beside the door!

They grew to be a symbol
Of life here on the sod.
For fruitful years of happiness
We thank Almighty God!

They seem to know our secrets,
Our trouble and our woe;
They seem to be like two old friends
The kind we all love so!

I know where there's an old worn pair,
In attic, on the floor;
Tomorrow I will bring them down
And set them by the door.

W. H. Elliston

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Patoran needs no incorporation. Rainfall sufficient to permit weed germination or crop growth will activate Patoran. Just apply it preemergence, broadcast or band, to the soil surface at planting, or preemergence to potatoes at drag-off. You'll stop the green bandits that reduce yields, harbor destructive insects, and complicate harvesting.

This season, get the kind of weed control you want with the margin of safety you need. See your CIBA dealer for Patoran. The herbicide that takes care with potatoes while it takes care of weeds.

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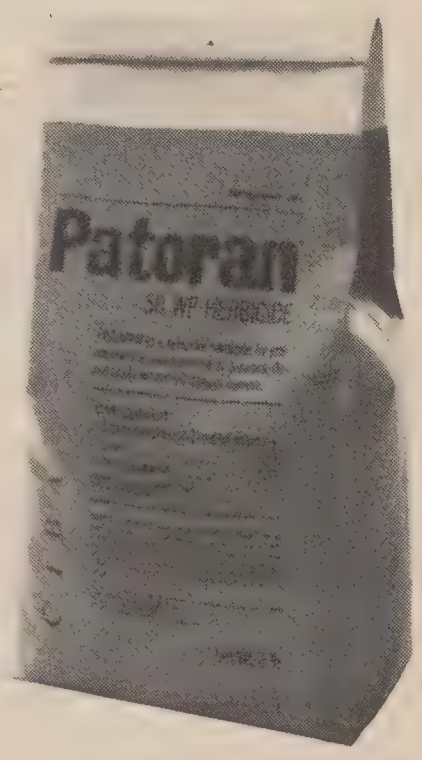

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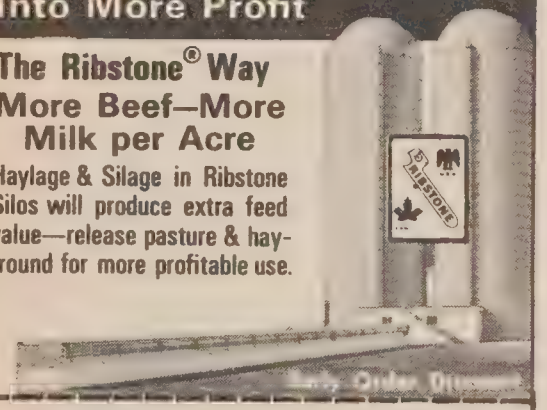

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NORTH TO ALASKA!

This year we offer you a choice of two Alaska vacations—the first, a leisurely trip entirely by train and steamer, from **June 1-18** when all attractions are open but before the midsummer tourist rush begins. Featured also is a visit to beautiful Jasper Park in the Canadian Rockies. The second tour is our traditional Alaska Holiday from **August 10-23** which takes us into the interior of our 49th state to see the heart of America's last frontier.

On our June tour, we travel from Chicago to the West Coast on the incomparable Empire Builder, following the mighty Mississippi and crossing Montana's "Big Sky Country" on our way to Seattle. Here, we drive out to see Mt. Rainier which is covered by 34 square miles of ice and rises 14,410 feet in the air. Next we visit Victoria's famous Butchart Gardens and Vancouver, Canada's most beautiful city.

Boarding the SS Prince George, we start our cruise to Alaska on the calm, blue waters of the Inside Passage. This is one of the most beautiful cruises in the world, also one of the smoothest, for never are we out of sight of the mainland. Ports of call along the way are Prince Rupert, Ketchikan, and Juneau, Alaska's capital city, where we go ashore for sightseeing.

At Skagway, we ride the famous narrow gauge railway to Lake Bennett and White Pass Summit, amidst an inspiring panorama of mountains, glaciers, and deep canyons. Back in Skagway that evening, we are free to look around this frontier town, perhaps visiting Soapy Smith's and Skagway's famous museum.

On our southward cruise, we stop at Wrangell and Alert Bay. We have a full day at Vancouver to relax, shop or sightsee before boarding the Canadian National's Panorama for the trip to Jasper. Sightseeing at Jasper Park includes Lac Beauvert, Pyramid and Patricia Lakes, Maligne Canyon, Whistler Mountain ski area, and one of the best known scenic attractions on the American Continent, the Glacier of the Angel on Mt. Edith Cavell. Our last sightseeing excursion is in Winnipeg, Manitoba, before we arrive in Chicago and say goodbye to all the new friends we've made in the last two weeks.

August Alaskan Holiday

On our second Alaskan vacation, we fly from Chicago to Seattle and from Anchorage back to Chicago. This tour, of course, includes many of the same things as the one we've just described—Victoria and the Butchart Gardens, the lovely Inside Passage Cruise, and the narrow gauge railway trip out of Skagway.

Other features of the tour are a drive along the beautiful Glacier Highway from Juneau to Mendenhall Glacier and Auk Lake and at Fairbanks, a cruise on the Tanana River aboard the only passenger sternwheeler operating in Alaska. We'll go ashore to visit an authentic Indian summer camp where natives still fish, trap and hunt to make a living. Touring the city of Fairbanks, we see a Gold Rush Town reproduced in every detail and pan for gold in Mining Valley.

Our visit to Eielson's Visiting

(Continued on page 61)

Gordon Conklin, Editor
Box 370-T
Ithaca, New York 14850

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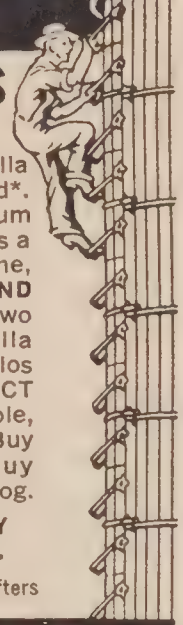

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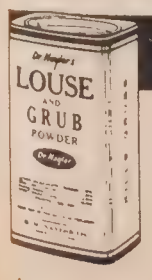

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Gardening . . . . .

(Continued from page 57)

ful. Dogwoods, birches, and all members of the maple family bleed freely when cut during the dormant season. If the bleeding does bother you, prune only **after** the leaves are out. When you do prune, be certain that the cuts are flush with the main branch or trunk and paint the cuts if they are over an inch or two across.

Hedges—On an old barberry or privet hedge that has grown way out of bounds, it's often smarter to cut the whole thing to within an inch or two of the ground than to attempt the tedious, back-breaking and time-consuming job of cutting it back a foot or two. The latter method results in a myriad whisk broom-on-a-stick sort of appearance whereas cutting to the ground gives you a whole new hedge.

You should heavily feed when you use the cut-to-the-ground method. A well fed hedge will usually bounce back two or three feet the first season! You can use this same technique on old overgrown shrubs in the border, too. A good plan for a much overgrown border that has lacked attention for several years is to cut back every other or every third plant, thus renewing the border over a period of two or three years.

Dormant Spray—Late March and early April are the times to head off a summer full of trouble. Experts consider the dormant spray the most important of all. More can be accomplished per dollar or per hour spent with a dormant spray than any other. Euonymus scale, maple leaf midge, the juniper scales, galls on blue spruce, tent caterpillars, and a host of other insects and their eggs can be easily destroyed at this time. Obviously, stronger applications can be used during the time when there are no leaves to worry about.

As we've told you before, we're scared to death of some of the highly toxic spray materials often suggested and used. Try to keep up with the latest information from unbiased sources such as your Extension Agent and use only the materials with low toxic ratings for birds, animals and people.

Bulbs—Watch them, for they should be starting shortly. If your mulch is too deep, remove part of it, so there is a maximum of two inches of loose mulch left. Otherwise, you'll have long, straggly, weak stems which are subject to wind and rain damage. If rabbits bother them, apply dried blood around them liberally. (This breaks down into excellent fertilizer, too.) Flowers of sulphur is also a good repellant; since this acidifies your soil, use it sparingly.

Yes . . . a six nylon roller pump for $19.95 at your Hanson dealer. If you don't know . . . . write Hanson Equipment Co. So. Beloit, Ill.

Alaska . . . . .

(Continued from page 60)

Center in Mt. McKinley National Park is one of the highlights of the trip. Its views of majestic Mt. McKinley, highest peak in North America, are unsurpassed. At Anchorage, Alaska's largest city, we drive out 50 miles to see Portage Glacier and the next day visit Matanuska Valley, famous for its 40-pound cabbages, 7-pound turnips, giant potatoes and other vegetables.

Here at Anchorage we have the opportunity to cross the Arctic Circle on a special two-day extension trip, going to Kotzebue, second largest Eskimo village in Alaska, and to Nome where we pan for gold, take a walrus skin boat ride on the Bering Sea, and shop for ivory, jade and fur souvenirs in the fascinating shops.

April in Hawaii

While it's true that Hawaii has no "off-season," perhaps the flowers are a little more profuse and the sunshine a little brighter in the springtime. If you have been thinking about visiting the Paradise of the Pacific with us from **April 19 to May 3,** don't delay any longer; send in your reservation today.

The trip starts with a wonderful day in the Pacific Northwest where we drive along the Columbia River Gorge and up the slopes of Mt. Hood. Then we wing our way across the Pacific to the **Big Island of Hawaii.** Here we visit an orchid nursery, Hawaii Volcano National Park, Akaka Falls, the City of Refuge on the Kona Coast, Captain Cook's Monument, and a coffee mill where the world-famous Kona coffee is produced.

On **Maui, the Valley Isle,** we explore Lahaina, historic whaling center, and see "The Needle," a volcanic freak covered with ferns and rising 2,000 feet above the valley floor.

Kauai is known as the **Garden Isle,** and sightseeing here includes the beautiful fern grotto in Wailua State Park and Waimea Ganyon, Grand Canyon of the Pacific.

Oahu is, of course, the best known of the islands, and our hotel is on famous Waikiki Beach. A few of the things we will see here are Iolani Palace, Punchbowl Crater, Sea Life Park, and the Polynesian Culture Center. We will also take a cruise to Pearl Harbor to see Battleship Row and the sunken USS Utah and USS Arizona.

Mail The Coupon

Other wonderful and exciting vacations are listed on the coupon, and we invite you to send for the day-by-day itineraries which also give complete cost information about each tour. When you buy your ticket for any American Agriculturist tour, everything is included in the price—transportation, first class hotel accommodations, meals and tips, baggage transfer, and all scheduled sightseeing. You have nothing to do but relax and enjoy yourself!

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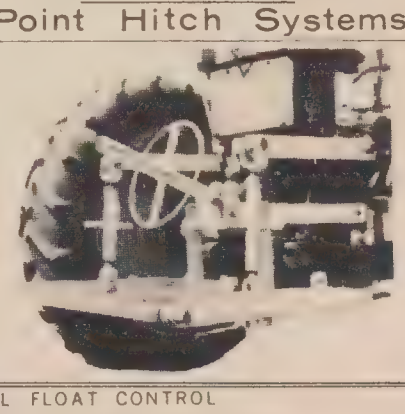

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Ed Eastman's Page

SAVE INSTEAD OF SPEND

Governor Nelson Rockefeller of New York has proposed increasing the sales tax from two to three percent, including several more items to be taxed. At the same time, the Governor proposed an across-the-board cut in spending of five percent.

Because this is written early in the legislative session, the bill may be defeated or approved by the time you read this. But if approved, and if state aid is included in the five percent cut, local taxpayers will have to pay more taxes for the next fiscal year . . . or else local officials will have to hold their budgets without any increases. It is about time that local, state and federal government officials should do more figuring on how to **save** public money instead of how to **spend** it.

A cut of five percent in state expenditures is not fair unless it applies to everybody. Putting it another way, if state aid is cut or not increased, then there should be no increased expenditures anywhere else in the state government.

MOVING DAY

March first was moving day in the horse and buggy days, and farm renting contracts were usually made for that date. This gave the mover time enough to get on his new farm and make his plans for the coming season. No matter what his discouragements and failures had been, the new farm gave the renter new hope and enthusiasm. This year, by gum, things are going to be different!

How well I remember moving day. It was with a feeling of real sadness that my younger brother Albert and myself went through the empty rooms of the house that we were leaving . . . the house where we had had much fun.

Finally, when the last piece of furniture was piled on the hay rigging on the bob sleighs, we started out new worlds to conquer.

One of the changes that we don't think much about now is the disappearance of all sleighing. In a hard winter like this one has been, sleighing came early and stayed late. They didn't have any more snow than we have, but the constant travel of horses and sleighs packed it hard on the roads so that it did not easily melt.

Finally, on that March day of long ago, we came to our new farm home in the valley over the hill. And it was fun running with Albert to explore the rooms in the big farm house.

This and many other incidents and experiences of farming and living in those seemingly happy horse and buggy days when life was not so complicated, are told in my book, "Journey to Day Before Yesterday." Dozens of people who have bought the book are writing me enthusiastic letters about their own experiences that the book has helped them to relive. Perhaps it would give you hours of similar enjoyment.

It can be purchased by writing to American Agriculturist, Book Department, Savings Bank Building, Ithaca, New York 14850. The cost of the book is $7.30 including tax.

WOMEN ARE THE BUYERS

The other day I spent some time in a big supermarket purposely watching the people who did the buying and what they bought.

If you have not been in a supermarket lately, you can have no idea of the changes that have taken place even in the last few years.

In my book, "Journey to Day Before Yesterday," I described the old-time country store with its open cracker barrel, its big cheddar cheese under a glass dome, and its chairs and benches where men gathered to solve all of the problems of the world.

All of that has, of course, changed. Gone are the loafers, and the old storekeeper is superseded by brisk modern business efficiency. At most, the old grocery store contained only a few hundred items. The manager of a supermarket told me that his store handled at least eight thousand items!

Manufacturers and advertisers better take note of the fact that the women, not the men, are doing the buying. In a checkout line I watched the women outnumbered the men ten to one.

A good half of the purchases in the supermarkets are nonfood items, yet they are included in the grocery bill, and farmers are blamed because "food costs so much!"

Another factor in the cost of food is the high cost of transporting food and putting it into fancy . . . and costly . . . cans and packages. As a matter of fact, of course, the farmer gets only a small fraction of the retail price of food, and there ought to be some way constantly to get that fact over to consumers.

A NOTE TO MY FRIENDS

I have always made it a point to answer the many letters I receive, but now I no longer can answer them all.

Perhaps it is unfair to ask you to continue your letters to me so that I may have your points of view for writing this page. But, even though you do not get an answer, won't you continue to write . . . the more the better! But please keep them short. Address me either at American Agriculturist, Box 370, Ithaca, N.Y. 14850 or at 515 North Tioga Street, Ithaca, N.Y. 14850.

NO ROOM IN THE HOUSE

On this page in our January issue I wrote a piece about the death of our kitten, Dally, to whom we were all much attached. As a result, I received several nice letters, and the following poem written by Mr. Clarence T. Ferris, Ilion, New York:

Little Kitty, you'll have to go out now,
And sleep all by yourself in the shed;
For since you have not yet been housebroken
There's no place in the house for your bed.

The thermometer reads below zero,
And the windows are covered with frost;
It would be a bad night for a pilgrim
Off the trail in the dark to be lost.

Are you trying to say something, Kitty?
But I guess I don't need to be told,
For that small plaintive face says, quite clearly
"Please, don't put me out there in the cold."

Now I'm thinking of Joseph and Mary,
And the Christ-Child, asleep in the hay;
For not even our Lord could find welcome
At the crowded inn that Natal Day.

Come in, Kitty, and rest by the fireside
For I do not want people to say
I refused even one little kitten
A warm place in my house Christmas Day.

NOT IMPOSSIBLE

At breakfast one morning right after the three astronauts had circumnavigated the moon, I asked my family if they believed that as great results would come from the moon voyage as came from the discovery of America by Columbus.

My family said, emphatically, "Of course not," and implied that I must be crazy to suggest it.

But wait a minute! If you are over middle age, would you have believed when you were young that what has happened in your time could happen?

Suppose new methods of transportation and communication are invented, as they will be . . . methods that we can't even imagine now . . . who can say that our grandchildren won't reach the planets, the stars, or accomplish other achievements that seem miraculous to us now?

I believe that God will continue to open great new achievements as we prove ourselves worthy. But I also believe that we must certainly do more than we are doing to keep spiritual progress in line with the material. Unless we build our house on the foundation of the eternal principles of right and truth, it will not stand.

What do you think?

BUGS OR FOOD—WHICH?

About every time you pick up a newspaper or magazine you read where some scientist, would-be scientist, or glory seeker is sounding off about insecticides, claiming that they are poisoning the human race.

Carelessly used or stored insecticides **are** dangerous. But farmers have been using them in agriculture for many years, and I have yet to see any proof by a reliable scientist who knows the whole farm picture that insecticides have done any great amount of damage. It is claimed that they kill birds, yet every year the birds, God bless them, return to build their nests and rear their young.

There is one thing for sure, if we do away with insecticides, or make it impossible for farmers to use them, we will soon be overrun by the insect world, and there certainly would be a lot more hungry people around than there are now.

SIGNALS TO WATCH FOR

At one time in my early life, my people kept only one cow. Because of the difficulty of getting her bred she often went farrow, and it was impressed on my mind because there were long periods when we did not have enough milk for family use.

Dairymen lose millions of dollars every year because of their failure to get their cows bred on time.

Vincent G. Hinkley of Eastern Artificial Insemination Cooperative, says that there are a number of definite signals to alert a dairyman when a cow is in heat, even a shy one. These signals include:

Bawling, holding up of the milk, not eating, restlessness, and the way she holds her ears.

Well-kept records will show you the length of time the cow has been fresh and the interval between heats. Of course the best sign of all is standing.

EASTMAN'S CHESTNUT

The night watchman heard strange noises in one of the darkened front offices. Deciding to investigate he approached the room and called, "Who's there? Come out with your hands raised so I can see who you is. If you don't, I'll come in and see who you was!"

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SERVICE BUREAU

For The Northeast Farmer

by M. A. Parsons

SERVICE BUREAU CLAIMS RECENTLY SETTLED

NEW YORK	
Mr. Charles E. Meyer, East Otto (refund on dog)	$ 50.00
Mrs. Grace Phillipson, Andover (refund on homework)	3.00
Mrs. M. H. Vollmer, Barryville (refund on cards)	7.60
Mrs. G. Wozniak, Pearl River (refund on film)	3.75
Mr. Paul Hopkins, E. Freetown (down payment refunded)	26.00
Mrs. Eva Grannis, Hermon (refund on order)	8.80
Mr. Homer Scott, Watertown (refund on unfilled order)	26.00
PENNSYLVANIA	
Mr. Edwin L. Morgan, Susquehanna (refund on chicks)	22.00
NEW JERSEY	
Mr. Richard Anderson, Milford (refund on garden tractor)	411.90
NEW HAMPSHIRE	
Mrs. Irma Bernaby, Fremont (refund on order)	14.95
VERMONT	
Mrs. Edith W. Knight, Bethel (refund on order)	18.00
CONNECTICUT	
Mr. Frank E. Beckwith, N. Franklin (refund on pullets)	62.00

IT'S SPRING AGAIN!

For the benefit of new subscribers, and as a reminder to those who have read it before, we are repeating our usual springtime warning.

Each spring, unscrupulous itinerants, usually from out of state, travel the countryside preying on the unwary, particularly the elderly or those who live alone. They include:

—Itinerant pitchmen who do a driveway resurfacing job that washes off with the first rain.

—Traveling repairmen who convince homeowners that their property is greatly in need of roofing and other repairs, and then overcharge for work that is not satisfactory or not even essential.

—Salesmen without proper credentials who rush customers into signing contracts which they have not read thoroughly or do not understand.

These are a few of the schemes about which we receive complaints. As consumers, it is our responsibility to be aware of possible swindles and to deal only with reputable parties.

Before hiring strangers for home improvement work, check on their credentials, check with others for whom they have done work, get estimates from local workmen.

Read any contract carefully, check credit charges, make sure it is completely filled in. You are obligated to understand any paper you sign.

Don't be rushed into anything. Reliable companies and salesmen will give you time to check.

CAN YOU HELP?

Mr. James Shopmyer, 2632 Zenner Rd., Schenectady, N.Y., is trying to locate the following books, "Deep Sea Sounding & Dredging 1880," "The Maine—An Account of Her Destruction in Havana Harbor 1899," by Captain Dwight Sigsbee.

It Pays To Be Protected

When disaster strikes let North American help pay the medical bills and provide extra income while laid up unable to work. It takes more than a single policy to meet today's high costs — that is why it pays to carry a combination of North American policies.

These folks did—do you?

Edna Goodfellow, Westerlo, N. Y. $202.15
Slipped and fell—broke ankle
Lowell R. Smith, Fillmore, N. Y. 350.00
Hit with bowling pin—broke tooth
Janet M. Cronk, Fillmore, N. Y. 396.40
Auto acc.—cut scalp, inj. knee
Alice V. Hill, Whitney Point, N. Y. 425.73
Fell—injured shoulder
Lynn Mosser, Conklin, N. Y. 338.78
Fell from porch—broke arm
Thomas Bohall, Randolph, N. Y. 988.70
Fell from silo—broke back
Anthony Chupa, Dayton, N. Y. 932.19
Auto acc.—whiplash, inj. spine
Winifred Glanville, Auburn, N. Y. 1334.00
Step ladder tipped over—broke ribs
Lee Conklin, Moravia, N. Y. 120.00
Hit by door—broke tooth
Patricia P. Steward, Kennedy, N. Y. 342.20
Kicked by heifer—broke hand
Robert Gehr, Sherman, N. Y. 490.39
Unplugging snow blower—cut finger
Edward Hartman, Big Flats, N. Y. 104.28
Run over by grader—injured foot
Bessie Phetteplace, Norwich, N. Y. 252.13
Fell on step—injured knee
Felix J. Bechard, Champlain, N. Y. 182.87
Repairing gutter cleaner—inj. hand
Fannie H. Palmer, Cortland, N. Y. 174.17
Fell on steps—bruised leg
Eber Cartwright, Denver, N. Y. 623.55
Crushed by cow—broke knee
Douglas O'Connor, Buffalo, N. Y. 1131.74
Gun accident—inj. side

August Rakodka, Chaffee, N. Y. $649.27
Auto acc.—mult. cuts, face, scalp
Victor Nichols, Burke, N. Y. 858.91
Fell off ladder—inj. chest, hip
Edward L. Englerth, Stafford, N. Y. 402.38
Slipped off tractor—broke elbow
Florence K. Miller, Dolgeville, N. Y. 339.09
Caught in wringer—broke arm
Marshall Rudd, Rodman, N. Y. 1702.75
Gored by bull—multiple injuries
Earle S. Snyder, Lowville, N. Y. 755.90
Tripped over dog—broke collarbone, ribs
Elisha F. Parker, Beaver Falls, N. Y. 879.98
Fell from ladder—broke leg
DeWitt C. Head, Waterville, N. Y. 483.10
Hay penetrated ear—inj. ear
Frank Yaeger, Webster, N. Y. 557.00
Fell—broke wrist
Dora Lottmann, Canajoharie, N. Y. 425.25
Caught in car doors—inj. leg
Carolee Fettinger, Sauquoit, N. Y. 271.35
Slipped fell—broke ankle
W. Dewey West, Phelps, N. Y. 535.18
Hit by rafter—inj. leg
Catherine Courneed, Holcomb, N. Y. 246.06
Door blew shut—broke wrist
Woodrow W. Doty, Sr., Warwick, N.Y. 326.00
Blower pipe fell—broke ribs
Florence G. Clark, Dec'd, Albion, N.Y. 1333.33
Auto accident—loss of life
Alma Moteyunas, Williamstown, N.Y. 124.00
Fell on slippery spot—broke wrist
John Cantwell, Jr., Richfield Springs, N.Y. 422.90
Bicycle hit tree—broke shoulder

Recent deaths and retirement of long time fieldmen have caused openings in certain areas of New York State and New England.

We are now looking for several career minded young men who wish to become local agents.

To learn of the opportunities available write to P. O. Box 100, Ithaca, N. Y.

Franklin Pitcher, Otego, N. Y. $137.13
Caught in V-belt—injured fingers
Paul Cipperly, Hoosick Falls, N. Y. 174.99
Fell on ice—broke wrist
George Morse, Sr., Hermon, N. Y. 287.03
Hay stack tipped over—broke rib
Louis A. Amyot, Hammond, N. Y. 353.58
Kicked by cow—inj. knee
Karolina Objartel, Middleburg, N. Y. 1410.00
Fell—fract. hip
Allan Mickel, Carlisle, N. Y. 968.65
Tractor acc.—frac. leg, cut head
Claude Ratliff, Montour Falls, N. Y. 257.13
Fell from stepladder—injured knee
Leon Sherrer, Burdett, N. Y. 279.05
Crushed by tractor—multiple injuries
Harry Dupuy, Interlaken, N. Y. 111.40
Kicked by cow—sprain back
Florence Steele, Romulus, N. Y. 578.29
Fell—fract. ribs
Stanley K. Smith, Hornell, N. Y. 909.62
Attacked by bull—broke collarbone & shoulder, cuts & bruises
Richard Brink, Berkshire, N. Y. 1220.00
Hand caught in rope and PTO
Charles Campbell, Nichols, N. Y. 989.55
Fell—frac. bones in forearm
Douglas Todd, Freeville, N. Y. 284.75
Fell playing ball—frac. arm
Patricia Romeo, Dryden, N. Y. 640.76
Fell—inj. back
Albert S. Fox, Oliverbridge, N. Y. 626.98
Crushed by cow—injured ankles
Eugene Bunker, Whitehall, N. Y. 402.00
Laying pipe, ground gave in—broke ribs, shoulder, bruises

Earl Heck, Sodus, N. Y. $625.00
Pulley hit mouth—cut lip, fract. teeth
Ruth Hartung, Palmyra, N. Y. 1181.07
Auto acc.—whiplash, concussion
Lillian M. Cofield, Warsaw, N. Y. 1224.28
Fell from stepladder—fx. hip.
Arden Sorensen, Himrod, N. Y. 184.28
Fell from tractor—inj. back, wrist
Jeff Warner, Gillett, Pa. 467.12
Auto acc.—inj. shoulder & head
Harry Mase, Jr., Liberty, Pa. 431.35
Tractor acc.—inj. back
Neil M. Chelton, Corry, Pa. 854.35
Dump truck rolled over—fx. leg
George A. May, Erie, Pa. 499.10
Hit by bale of hay—inj. knee
Nina I. Perkins, Oswayo, Pa. 730.00
Fell from tractor while getting off—inj. back
Ivan B. Payne, Brackney, Pa. 200.07
Fell off ladder—injured back
Claude Eldred, Honesdale, Pa. 442.13
Kicked by cow—inj. ribs
Granvil M. Thompson, Chester Depot, Vt. 1395.00
Fell from ladder—fractured neck
Jerra Dashner, Montpelier, Vt. 225.00
Piece of wood struck eye—inj. eye
Lucy Roberts, E. Northfield, Mass. 200.00
Fell—broke arm
David Good, Fort Fairfield, Maine 275.35
Splitting wood, piece of steel lodged in thigh
Josie Smith, Dec'd, Belevidere, N. J. 2900.00
Fell from ladder—loss of life
Helen Hendrickson, Princeton, N. J. 674.69
Fell down steps—inj. hip, elbow

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NORTH AMERICAN ACCIDENT INSURANCE COMPANY
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ORDER NOW -- SAVE UP TO 50%

BONUS!

RED PEONY ONLY 15¢

Orders for $3.00 or more can order a delightful red Peony bush for only 15c. (A reg. $1 catalog value.) Only one 15c bonus per customer. Place your order now.

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10 TO 18" COLORADO

BLUE SPRUCE

3 for $1.00

(7 for $2.00)
(16 for $4.00)

Now, the very popular, very lovely Colorado Blue Spruce (Picea pungens glauca) at a very unusual low price! As versatile as they are beautiful, Blue Spruce are excellent in corner groups, as windbreaks, or as individual specimens. These healthy, nicely rooted 4 year old 10-18" northern nursery grown seedlings are just the right size for trouble-free transplanting. You can trim and shape your trees to your liking as they grow. These strong handsome trees are fully guaranteed. Order now on the handy coupon to take advantage of these sale prices.

Marvelous Color Changing

HYDRANGEA TREE

Regularly $2.00 each. Now ½ Price . . .

$1.00 ea.

(3 for $2.50)
(6 for $4.50)

Now for our spring sale, we have drastically lowered the price on our best-selling Hydrangea Tree (Hyd. P.G.). A wonderful buy on this amazing tree! Masses of 6-10" flowers that change from snow-white in mid-summer to bluish-pink in August to royal purple in autumn. Excellent tree for specimen or ornamental planting. Especially nice in groups of three. Easy to grow. Fast growing. You receive choice 1½-3' nursery-grown trees with a vigorous root system. Order several today during our half-price offer.

FLAMING FALL SPLENDEUR

ROYAL RED MAPLE

Outstanding Bargain

Regularly $1.50 ea.

$1.00 ea.

(3 for $2.50)
(6 for $4.50)

One of Fall's most richly colored trees is the beautiful Red Maple (Acer rubrum) with its brilliant scarlet leaves. In spring the tree is loaded with delicate small red flowers. In summer, the rich green leaves give wonderful shade. A very majestic and beautiful shade tree that will give you years of proud satisfaction. Excellent as a lawn or street tree. You receive strong, heavily rooted hand selected 2-4' collected trees. An ideal transplanting size.

Beautiful All Year Long!

WHITE BIRCH

Regularly $1.50 ea.

NOW ONLY **$1.00 ea.**

(3 for $2.50)
(6 for $4.50)

⅓ off our regular catalog price! The graceful White Birch (B. papyrifera) will add beauty to your yard all year 'round. Rich green leaves in spring and summer turn to a spectacular gold in the fall. And in the winter, the glistening white bark will delight every viewer. White Birches are hardy, fast growing, and require little care. Especially lovely planted in groups of three. You'll receive healthy, hand-selected 2-4' nursery grown trees.

SEND NO MONEY! Mail order coupon today. On delivery, pay postman for the items plus postage and COD charges. On prepaid orders, please add 50c to help postage and handling.

FULLY GUARANTEED! All items guaranteed to be of high quality, exactly as advertised and to arrive in good healthy condition or purchase price will be refunded. RETURN SHIPPING LABEL ONLY — you may keep the items. (1 yr. limit.)

BONUS!

30¢-25 STRAWBERRIES

Orders of $5.00 or more, in addition to other bonus offer, are entitled to 25 super-big, super-sweet Giant Robinson strawberry plants, a $2.25 value. One offer per customer.

Blazing Beauty for Autumn !

CUSHION MUMS

½ PRICE!

10 for $1.00

(20 for $1.75)
(30 for $2.50)

BUSHELS OF BLOOMS !

Plant these hardy mums this spring for scores of beautiful blooms from late August till frost! Our special ½ price sale will enable you to fill your entire yard or garden with these favorites. Every plant guaranteed to bloom the first year from our choicest field-grown root divisions. Rich color assortment in our choice — pink, bronze, red, or yellow. Very hardy — grow more beautiful year after year. Make excellent cut flowers. Sorry, not sent to California, Washington, or Utah.

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Please send these items: ☐ Prepaid ☐ COD

HOW MANY	CAT. NO.	ITEM	COST
	174	Blue Spruce	
	249	Cushion Mums	
	719	Red Maple	
	854	Hydrangea Tree	
	919	White Birch	
BONUS	632	Red Peony only 15c	
BONUS	740	25 Strawberries 30c	

TOTAL

(Please add 50c on prepaid orders)

(Ill. residents also add 5% sales tax)

Name

Address

City

State Zip

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For The Northeast Farmer

APRIL 1969

American Agriculturist

and the

RURAL NEW YORKER

ENTERPRISE: a land-short New England farm gearing itself to support a 150-cow dairy

"We've got to be big as well as good. So we are expanding our herd without adding more men."

Dan Galusha, Fairfields Farm, Williamstown, Mass.

"Even though we own 600 acres," says Mr. Galusha, "very little is flat land, and only 161 acres are tillable. The rest is in timber, Christmas trees, and permanent pasture. We rent an additional 95 acres of cropland. Because our tillable land is scarce, we *have* to get higher yields from our enterprise to support more cows. Agway is helping us do this."

In a good year, Dan and Mary Galusha look for corn silage yields of 20 to 25 tons per acre to fill their new 60′ x 24′ Agway-Craine silo and the huge bunker silo scooped out behind the new Agway barn. Agway's Dave Manners works closely with Mr. Galusha to get the required yields through correct fertilization, plant population, and weed control.

Dave and Dan have had this association since 1956. Through Dave, Fairfields Farm is kept informed on what's new, and any special offers on Agway feed, seed, fertilizer, and other farm supplies.

"When we have an unusual situation, such as abnormal calf mortality, Dave brings in outside specialists to pinpoint the trouble and help us correct it," says Mr. Galusha.

Dave also made sure the Galushas understand Agway's Enterprise Services which provide a farmer with the backup he needs to reach his goals. Among these services is Agway's Profile Management Service, which provides a wide variety of computer-generated management reports. These give a precise fix on the state of the farmer's total enterprise and suggest the many alternatives that might be open to solve such problems as balancing available roughage to purchased feeds for the least-cost route to correct energy intake, or determining which cows need special attention to show a better profit. Through these Profile Reports farmers can better utilize their capital, land and labor.

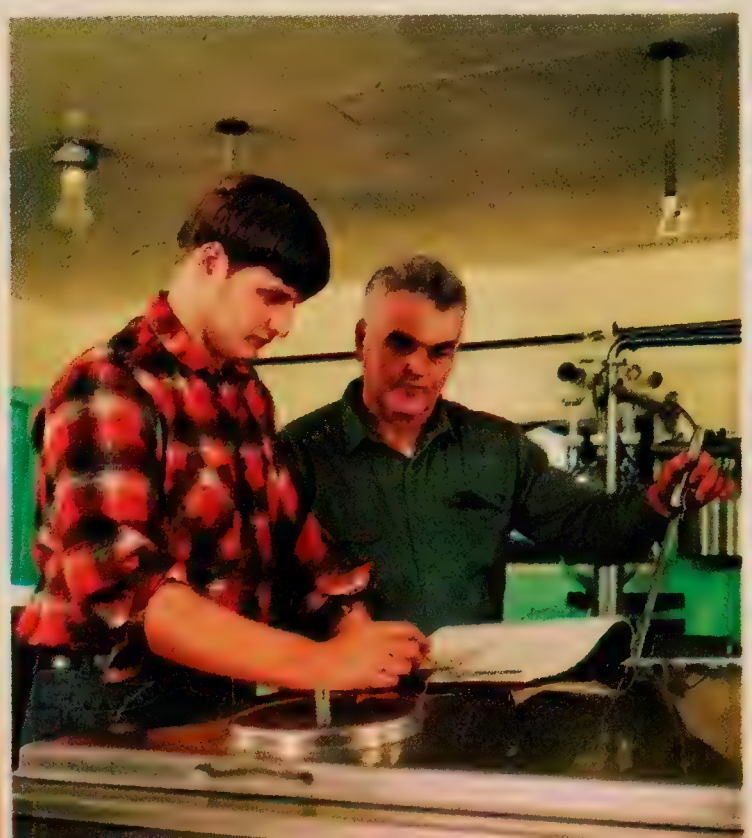
No matter what your farm enterprise might be, Agway has developed services to assist you. These services go far beyond the supplying of quality commodities at competitive prices. They include planning and construction of buildings, complete automation systems for feed and roughage, herd-health and sanitation programs, petroleum services, and insurance programs to fit all farm needs.

To find out more about Agway Enterprise Services, visit your Agway store or representative. Or write to N. E. White, Agway Inc., Box 1333, Syracuse, N.Y. 13201.

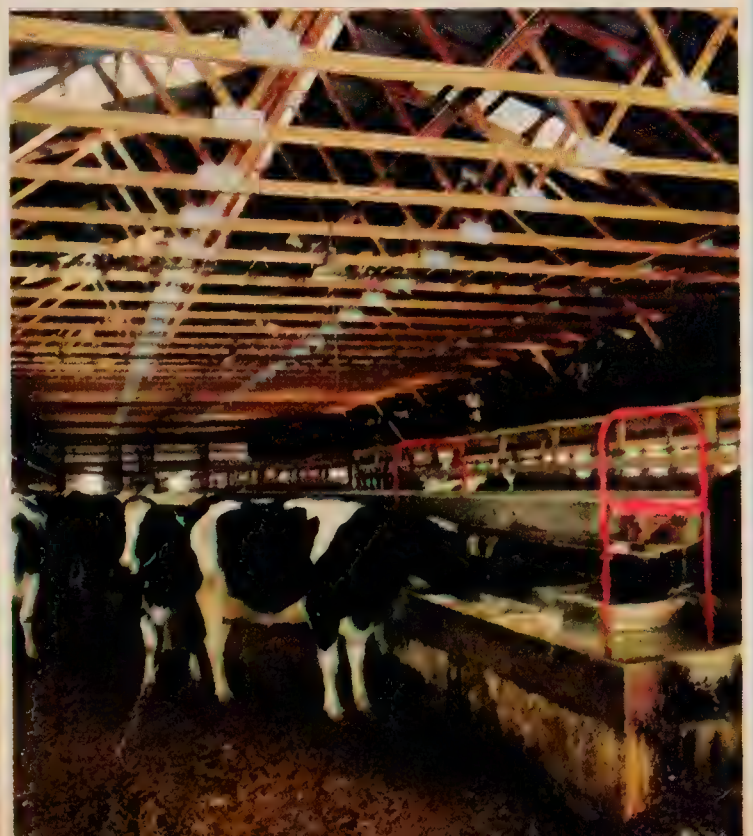
FARM ENTERPRISE SERVICE Agway

Dan Galusha and Dave Manners spend a lot of time planning so that feed, seed, fertilizer, and other supplies are on hand when needed. "When we're feeding a ton and a half a day, we can't run short. Same with spare parts. We're so mechanized that a breakdown would be a catastrophe," says Mr. Galusha.

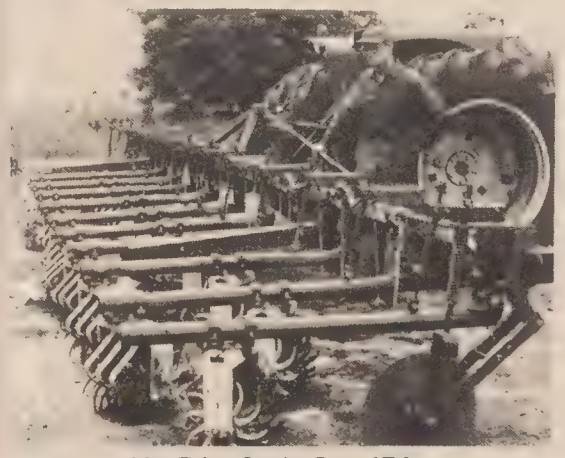
In this spacious milkhouse, the Galushas have installed tanks which have a combined capacity of 1135 gallons. Dan and Jim, one of the three Galusha sons, check the milk level. "We have exceeded our capacity several times," says Mr. Galusha, "and we're going to install bigger tanks."



Nerve center of Fairfields Farm is this new 150-cow Agway loose-housing barn and adjacent 12-stall milking parlor. This barn is fully automated for push-button feeding of hay, silage, and grain. Outside is a 3000-gallon tank for storing molasses, which is poured on top of silage before it travels to the cows.



Mr. CASH and the ROLLING® CULTIVATOR



Mr. Fritz Cash, Box 474,
Hanover, Wisconsin 53542

"We got our two Rolling Cultivators for our 1,500 acre corn operation because we needed tillage equipment of unusual speed that would save us time and labor. Our units operate about twice as fast as shovel-type cultivators.

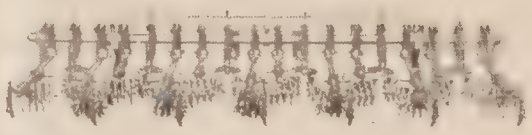
"We put in the crop with a 12-row planter and usually cultivate twice the first time through, we adjust the Rolling Cultivator gangs to throw the dirt away from the crop., In the second cultivation, we adjust the units to throw the soil back to the plants.

"We also spray Atrazine and cultivate the crop at the same time with our Rolling Cultivators. Our units do very clean work and produce a good moisture-holding mulch. Without our Rolling Cultivators, it would be hard to keep ahead of a big crop like ours."

The Lilliston-Lehman

ROLLING® CULTIVATOR

finest, fastest tillage tool on earth



cultivates crops • mulches soil • bars off lays by • builds beds • incorporates chemicals • conserves moisture preserves roots

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Manufacturers of Lilliston Quality-First Rotary Cutters and Lilliston Peanut Equipment

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For The Northeast Farmer

American Agriculturist and the RURAL NEW YORKER

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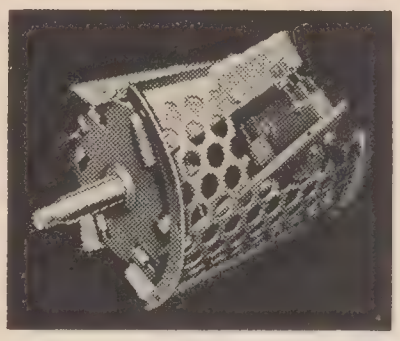
OUR COVER

Here's a sight that makes anyone glad to be alive! Photo courtesy of the J.I. Case Company, Racine, Wisconsin.

TRADITIONALLY NEW . . . FIELD TO FEEDLOT

GEHL



INSTANT SHORT CUT
New Cylinder-Screen Chopper

A cylinder-screen cutting mechanism assures short, uniform chopping with the all-new Gehl 600 Chopper. The powerful blower whips crops to the back of any forage box *instantly!* No lingering here! Material is kept moving for faster cutting, greater capacity.

With Gehl, there is no feed apron. Crops are guided directly into the throat of the chopper. The unit is shorter from front to back for greater maneuverability. A tough 3-inch diameter shaft whirls the cylinder at 1,000 RPM. Six 21-inch long knives provide 6,000 cuts per minute. Crops go up-and-out. Every bit. Every time.

Compare the Gehl 600 Chopper with *any* other unit. You'll see longer knives, a larger (120 sq. in.) throat area, a bigger (374 sq. in.) screen area.

Three attachments available: Hay pick-up; one-row, and a two-row that handles both wide and narrow rows. Built-in knife sharpener and tungsten-carbide cutting edges on knives and cutterbar are standard equipment.

Gehl forage harvesters are preferred by farmers throughout the world.

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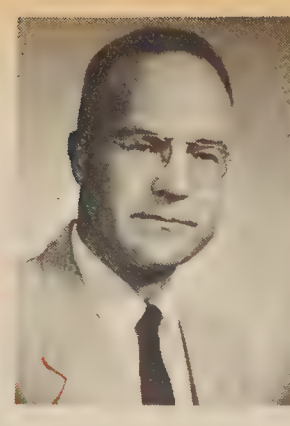
West Bend, Wisconsin 53095

C2D-11-21

EDITORIALS



by GORDON CONKLIN

THE POSITIVE FORCE

I watched from a hilltop the other day as a honey-wagon traced patterns across a snowy and lifeless field. My mind's eye saw . . . not the unlovely material that browned the snow . . . but rather the lush, green corn that would soon exert its mysterious alchemy to transform waste into a golden harvest.

To the West, the sun dropped behind a ridge . . . standing stark and barren beneath a leaden sky. But I knew that an irresistable call would soon go forth to a million living things along that ridge . . . that the sounds and sights of spring would soon transform its apparent death into vibrant life.

Across the years, I have reduced to a very short list the things I knew for sure. But the conviction has deepened that the positive forces of life can never be permanently overcome by the negative. The life stories of people . . . the rolling seasons . . . the physical laws of the universe . . . all tell of the ageless opposition of positive and negative forces.

Easter whispers a message of hope about death . . . considered by most of us to be the ultimate negative. It does not tell us that we should ever expect to solve all our problems and live happily ever after . . . indeed, its hopeful message is painted on a canvas of pain, frustration, and despair. Lord knows we have all seen our share of those minuses of living . . . Easter boldly proclaims that even they can find their place in the ranks of the plus.

Take heart, my friend!

EARLY INVITATION

Empire Farm Days will be held on August 5-7 this year, at the Piffard Farm of William Selden (Elm Place Angus), Avon, New York. The nearest settlement to the location of the event is Retsof.

More details will be coming from time to time in our pages, but start early to plan some time at Empire Farm Days. You'll have a chance to see equipment galore . . . many items of which will be demonstrated in action. Exhibitors and farmers alike agree that it's one of the finest machinery shows anywhere around.

See page 61 for more of those details I mentioned.

NOT GOING AWAY

This year of 1969 marks the 100th anniversary of . . . you'd never guess . . . yep, oleomargerine!

The vegetable spread first saw the light of day in 1869 in the laboratory of a French chemist-pharmacist, who patented his early formula in 1873. In America, it was first produced in New York City in 1876.

Emerson, you'll remember, once said, "Beware an idea whose time has come." Oleo's "time" didn't really arrive until World War II, after which it forged steadily ahead in its competitive battle with butter . . . until its per capita consumption in the U.S. is now 10.6 pounds, compared with butter's 5.9 pounds.

Dairymen, don't be lulled by the relative lack of success shown by filled and imitation milk in the Northeast. These products have not gone away indefinitely . . . they have only retreated to fight again another day.

The dairy industry needs aggressive and forward-looking programs for new-product development and promotion more than ever . . . so that the time never comes for the fluid "low-priced dread" in the Northeast!

NO SPANKING

Some folks in our permissive society argue that punishment is not a deterrent to crime. How come, I'd like to ask, are dozens of planes hijacked to Cuba . . . where the hijackers aren't punished . . . yet none are hijacked within the United States, where the culprits would be punished?

It looks as though we'll be engulfed in a tidal wave of crime long before we're overcome by the hordes who envy our affluence.

What are your thoughts on the correlation of crime and punishment?

AGRICULTURAL RESOURCES

One of my extracurricular chores is to serve as chairman of New York's Agricultural Resources Commission. Among others, its responsibilities include developing recommendations for reconciling urban growth with a strong agricultural economy in the State, and working with state and federal agencies in matters affecting agriculture.

I'd welcome letters with ideas about how to keep farming competitive in the Empire State . . . thoughts on designating prime agricultural areas, and suggestions about opportunities to build sound land-use foundations for the future.

I can't promise to act on every suggestion, but will promise to give them serious consideration!

GUARANTEED INCOME

Once upon a time, in the far-off land of Cooperating States, there arose a great argument. Seeing that some people were less affluent than others, the high priests of the country stated that there should be a minimum annual income for everyone . . . regardless of the productiveness of the individual involved. "The 'work ethic' is a useless appendage of the Puritan past," quoth they.

But in those days there arose at one of the Seventy Seminars on Society a man who doubted.

He posed a question to the high priests, "Have you provided a guaranteed annual wage for your mature sons and daughters?" After some consultation, the chief priest replied in the negative.

The doubter thundered, "I shall not press you as to why . . . but I think I know. The natives of our land were given a guaranteed annual wage generations ago . . . and the result has been dismal beyond description. You would not want their fate visited upon your family!

"You know that the growth of human personality is stimulated by meeting a challenge head on, that character develops in the crucible of overcoming adversity, that the individual grows amidst a stream of creative effort and responsibility. You seek to enslave the poor by chaining them to a guaranteed handout . . . so that your piety will be publicly acclaimed, and so you can establish firmly and indefinitely your feeling of superiority over those unfortunates whom you claim to love.

"Love at its best seeks for others the opportunity to attain those objectives that you seek most avidly for yourself. You avoid the issue when you propose paying off the poor with a pittance so they will go away and not bother you!

"You argue that human beings are in essence the same regardless of creed, color, or belief . . . or economic status. How, then, can you propose programs on behalf of the poor that you reject concerning your own family? There have been those who eloquently defended human slavery . . . even quoted Scripture in its support. But they could never really explain away the fact that they would resist to the death being enslaved themselves.

"I ask once more . . . would you be willing to begin a program of guaranteed annual wage for yourself and your descendants?"

And to this day, the high priests have not answered that question.

SOMEWHERE ELSE

Many people want convenient air travel readily available, but hardly anybody wants the airport within 50 miles of **his** home!

A new jetport serving the New York City area has been seeking a home for years . . . on the Orange County (N.Y.) mucklands, on Long Island, in Morris County (N.J.), and in the pinelands of the Garden State. The farmers of Orange County's fantastically-productive "black dirt" fought it out of there . . . Grumman Aircraft lowered the boom on the Island . . . wealthy estate owners in Morris County pulled a wondrously slick trick by involving the Audubon Society in the scrap there . . . and now the pinelanders are fighting the jetport on behalf of "cranberry growing, underground water supplies, wildlife protection, and air pollution."

When the chips are down, folks, it's a fact of life that birds usually win a battle involving a choice between feathered friends and food production. It seems to me that locating a jetport in the pinelands makes more sense than plunking it in the middle of highly-productive soils that took ages to create. Perhaps land now owned by the state or federal government . . . such as the Lakehurst Naval Air Station, would be the best answer of all.

Or maybe we should leave the flying to the birds . . .

RESEARCH HELP

Not long ago, the Storrs Agricultural Experiment Station at the University of Connecticut received a $3,000 grant from the Eastern Artificial Insemination Cooperative of Ithaca, New York. The grant supports the reproductive physiology program of the Animal Industries Department.

This is only one of hundreds of similar grants by private industry to support agricultural research at public institutions. Far from being competitors for the allegiance of technology-seeking farmers, private industry and public research can both function more effectively as partners in promoting progress.

Sutan® 6-E/ATRAZINE combination

SELECTIVE HERBICIDE

This could be your most effective grass and weed control program for corn!

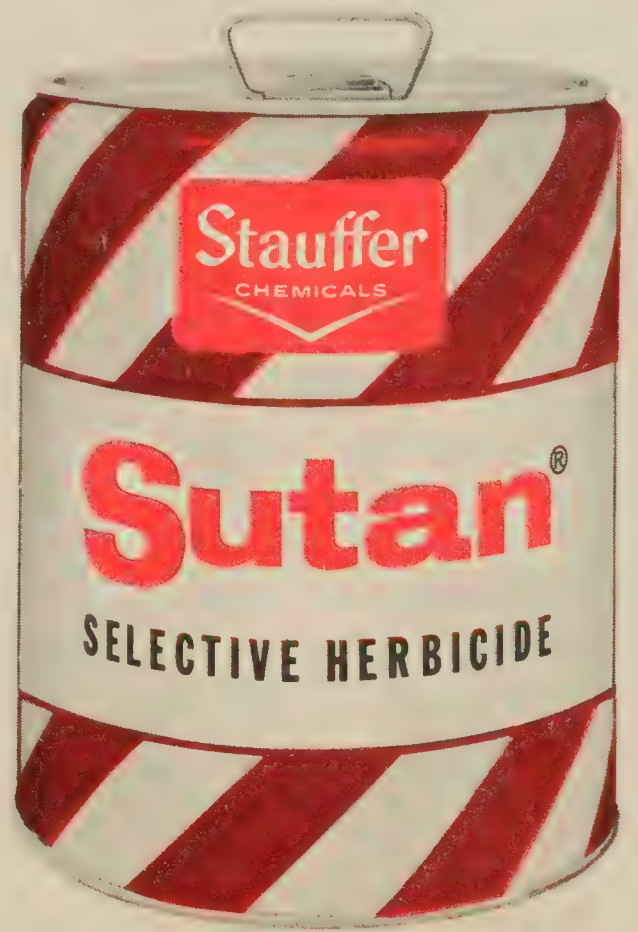
SUTAN 6-E is the great new selective herbicide for pre-plant application that effectively controls many annual grasses and nutgrass in corn. When used as directed, SUTAN doesn't leave harmful soil residues in your fields.

SUTAN is equally effective in controlling problem grasses . . . *plus many broadleaf weeds* . . . when used in a tank-mix combination with atrazine. Years of testing in commercial applications across the country prove it. The simple fact is that the combination of SUTAN 6-E plus atrazine controls more grasses and broadleaf weeds *than either material will control alone*. Growers who have used the combination . . . particularly in the wet spring of '68 . . . are calling it the most important grass and broadleaf weed control development ever made.

At last growers have the final ingredient they've needed for a complete early season planting program. SUTAN may be combined with slurry or suspension fertilizers. It can also be combined with solution fertilizers and soil insecticides if physical compatibility is checked first and found to be correct. This means you now have one-step control of annual and perennial grasses, broadleaf weeds, soil insects and can fertilize your fields in one operation . . . before you plant your crop. Think of the time, labor and money savings this can mean! Plus the headstart you get on the season with early planting. *Because you mix* SUTAN/Atrazine *combinations into the soil, there is no waiting for hit-or-miss rainfall to move it into the weed and grass seed zone. It's there, working as soon as seeds germinate.*

Just what will a SUTAN/Atrazine combination control? A total of eleven annual and perennial grasses, including; barnyardgrass (watergrass), giant, green and yellow foxtail, Johnsongrass from seed . . . and *both* yellow and purple nutgrass (nutsedge). Controls them all as their seed start to germinate. It also controls ten annual broadleaf weeds the same way, including: annual morningglory, lambsquarters, mustards, nightshade and velvetleaf.

SUTAN/Atrazine is so effective, many growers are reporting only a single cultivation for the entire season, just to break up crusted soil after wet weather. Possibly the biggest plus is the fact that you can use lower rates of atrazine to get this kind of control . . . while reducing the potential hazard of atrazine carryover in your fields.



SUTAN 6-E . . . when used alone as directed for grass control . . . leaves no harmful soil residues to carryover and interfere with your cover crops or rotation programs. Where SUTAN 6-E is used alone, and broadleaf weeds become a problem as the season progresses, a post-emergence application of 2,4-D is recommended. Get all the money, time and labor saving details on SUTAN "the grass-getter" and SUTAN/Atrazine combinations for broader spectrum weed and grass control from your Stauffer dealer. Order soon. Stauffer Chemical Company, Agricultural Chemical Division, 299 Park Avenue, New York, N.Y. 10017.

Read the label, heed the label and
GROW WITH STAUFFER CHEMICALS

Guthrie comments on:

MASTITIS CONTROL

by Hugh Cosline

MASTITIS costs dairymen millions of dollars every year. Here is information on a problem that has haunted the dairy industry from its beginning, drawn from an interview with Dr. R. S. Guthrie of Cornell's College of Veterinary Medicine, who is supervising veterinarian of New York's Mastitis Control Program:

What causes mastitis?

Infectious mastitis is an infection of the udder, usually caused by one of four organisms, the most common carrying the name **Streptococcus agalactiae,** which gain entrance to the udder through the teat canal. There is no evidence of a direct connection between feed and mastitis, though poor nutrition may contribute to a cow's susceptibility.

The noninfectious form of mastitis does not involve any pathogens at the beginning. It may be caused by such stress factors as over-milking or striking the cow . . . anything that causes an increase in the leucocyte (white blood cell) members in the udder.

Most of the following comments will concern the infectious type.

How does mastitis affect the cow?

The organism invades the udder tissue, causing the secretion of abnormal milk, and eventually destroying part of the tissue, thus reducing milk production.

What loss does mastitis cause?

(1) The production of abnormal milk which cannot be sold; (2) lowered production; (3) possible sale of off-flavor milk which hurts fluid milk consumption; (4) possible refusal of milk at the plant; (5) shorter cow life, and increased cost of more and early replacements.

What causes a "flare-up" of mastitis in a dairy cow?

Tests show that about half of all dairy cattle have some infection in the udder. The things that cause a flare-up include udder bruises, chilling, stress (such as being chased by a dog), lack of sanitation . . . but most important, poor milking techniques.

How can mastitis be detected?

The use of a strip cup before milking detects abnormal milk fairly early. A veterinarian can usually spot an infected udder by a physical examination, even though a case has cleared up. There are two tests . . . the California Mastitis Test (C.M.T.) and the Modified Whiteside Test . . . which spot abnormal milk in the early stages of mastitis.

The Modified Whiteside Test is now a required screen test run on all bulk or blended milk in New York State on a monthly basis. This test provides the means of detecting the presence of unfit or abnormal milk in the general supply offered for sale by the dairyman.

The field men employed by the milk plants are not ordinarily expected to check the milk secretion from each cow at a farm where trouble exists. They do, however, make recommendations to a dairyman who has an unsatisfactory MWT test (2 or higher) as to the steps he should take in an effort to correct the problem.

Corrective measures involve one or more of the following causative or contributing effects which, when identified, would result in the milk from such cows being kept out of the general supply: (1) Cows in late lactation and cows being milked once daily as when drying off. (2) Cows just fresh or still in the colostral stage. (3) Any abnormal secretion caused by injury or other stress factors.

Beginning July 1, 1970, Phase III of a national program begins . . . whereby punitive action will be taken against dairymen whose milk contains more than 1.5 million leucocytes per milliliter in 3 of his herd's last 5 tests.

How can a dairyman prevent or control serious outbreaks of mastitis in his herd?

Prevention is better than control. A good first step is to find exactly what the situation is at present. A veterinarian can help by examining the herd, including use of the California Mastitis Test on each quarter. He might recommend the sale of cows badly infected, therefore more likely to have a "flare-up," and where production has been lowered by destruction of udder tissue. He might suggest medication for some animals.

The veterinarian could also arrange for a herd survey (in New York State) by the Mastitis Control Program, where quarter samples from each cow would be taken and cultured in the laboratory. Individual quarter infections would be identified and treatment initiated on this basis.

It is extremely important to eradicate **Streptococcus agalactiae** in the herd by repeated culturing and treatment. Once eliminated, Strep. ag. never returns unless it is re-introduced, usually by way of a purchased addition, which is an animal of milking age carrying the infection in one or more quarters.

In the case of milking machine and utensils, it means cleanliness, not just a clean look but sterile (free from bacteria). Teat cups are disinfected between cows, and teats are dipped after milking in a mild disinfectant solution. Dairymen should be careful about using just any grocery-store laundry bleach; some of them are so caustic they will irritate the teat end.

So far as a cow's surroundings are concerned, it means regular cleaning of droppings and a barnyard free of mud.

What does a cow's comfort have to do with mastitis?

Any stress paves the way for an attack of mastitis. Stalls too narrow or too short cause discomfort. An udder than hangs into a gutter or a teat stepped on by another cow spells trouble. Poor ventilation and moisture-laden air are bad. Inadequate or dirty bedding may result in a chilled or infected udder.

What about milking machine conditions?

By this we mean a machine that is clean and properly adjusted. A vacuum that is either too high or too low irritates udder tissue. Wornout inflations are another cause of trouble.

Do milking machines cause mastitis?

Not if they are in good mechanical condition and properly used. Here is where proper milking procedures come in. One of the worst troubles is leaving the machine on the cow too long. The best rule is that the machine should come off just as soon as all the milk is removed. Most cows respond to rapid milking.

Some dairymen try to save time by using too many units. Two conventional units or three pipeline units are enough for one man to handle in a stanchion barn.

Some dairymen are too enthusiastic in their machine-stripping techniques . . . irritating the tender udder tissue. As I've said, such irritation creates a situation where leucocyte numbers increase.

Always follow the manufacturer's directions carefully, as well as the recommended milking procedure.

Is any particular milking order desirable?

Yes! Milk heifers first; they are least likely to have latent infection. Early in the milking order put "leakers" and cows that "let down" the milk before being washed. Milk slow milkers and those that show signs of udder infection last.

In a milking parlor, it's desirable to have a conventional milker unit that can be used to milk cows whose udders have been infused with antibiotics . . . and the cows having a case of clinical mastitis.

Is mastitis a public health problem?

Apparently not, at least not a serious one. However, health authorities take a dim view of the sale of milk from cows affected with mastitis. Such milk can be refused at the plant and returned to you. This can be a serious loss.

Can drugs be used to treat mastitis?

Yes, but prevention is better. Any one of several drugs can be put into the udder through the teat canal and will help to "cool

(Continued on page 8)

BREAKTHROUGH

Researchers at Cornell University report that their British counterparts have developed a new approach to mastitis control that has been unusually effective in on-the-farm and controlled-experiment tests.

It involves infusing each quarter of a cow's udder with a large dose of antibiotic **on the day she is dried off.** Teat ends are dipped in a 4 percent hypochlorite solution then . . . and immediately after each milking (when she eventually returns to the milking string).

The infusion cleans up pathogens in the udder . . . a process aided by the absence of dilution from milk secretion. The dip kills any organisms around the teat opening, thus preventing **new** infection.

The British are using Cloxacillin . . . and a combination of synthesized penicillin and a benzathine salt. The latter is responsible for the slow release of the antibiotic into udder tissue after the infusion is made. Obviously, it is suited only for dry-cow treatment.

The Food and Drug Administration has not as yet permitted the use of Cloxacillin in the United States. The U.S.-developed experimental material used in the trial in New York State was as effective as Cloxacillun, and may become available in the near future.

If you can grow it, Chevy can haul it. Better.

Whatever you grow, whatever the size of the job, your trucks should be Chevrolets.

You want reasons. Here are just a few. Chevy makes any type of truck you need. Pickups to the big diesels. Latest pickup in the Chevy line is the Longhorn. ¾- or 1-ton rating. 8½-ft. box. Independent Front Suspension. Tough leaf springs in back. Works hard and takes a big camper body when you and the Mrs. want to take off for a few days. All Fleetside models are double-strong where it counts, in both cab and cargo box.

Chevy medium- and heavy-duty models with 9- or 12-ft. stake bodies are the mainstay of many a hard working farm. They come with a selection of Sixes or V8s—up to the 260-hp 427 V8.

A Chevrolet dealer is always close by. So are the parts you need for quick service when necessary.

When it comes to long life, Chevy has them all beat. It's a matter of record. For particulars, see a friend of yours. Your Chevrolet dealer. . . . Chevrolet Division of General Motors, Detroit, Michigan.

CHEVROLET

More trucks are Chevrolets because Chevrolet is more truck!

THE FAMILY FARM

SPEAKING at a meeting of the New York State Agricultural Society, Cornell's Professor L. C. Cunningham made the following comments on the family farm:

The family-size farm, meaning operations carried on mainly by the farmer and members of his family, is traditional in our agriculture. Some people are convinced that there are forces at work which will change this structure. Others believe that the family farm is undergoing many changes but that its essential nature is unchanged.

It is a well-known fact that the number of farms in New York State has shown a sharp decline. This change has been going on for a long period of time. Just since 1950, the number of farms has declined from 136,000 to 61,000 last year.

Likewise, it is widely observed that the total number of workers on farms in the State has also declined. The figures show a drop from 248,000 workers in 1950 to 104,000 in 1968.

But what may not be fully realized is that the changes in these two historic series have been at remarkably similar rates, with the resulting significant fact that the number of workers **per farm** was fairly stable at about 1.9 until the early 1960's. In recent years the figure has decreased to 1.7 workers per farm. It is a striking fact that with all of the changes that have been occurring in farming, **the average size of the farm labor force per farm has been remarkably stable.**

Furthermore, despite all the difficulties of hiring labor on farms, the proportion of hired workers to the total labor force has also continued nearly unchanged. The proportion of the total labor force that was hired was about 35 percent in the early 1950's and continued in that relationship until the early 1960's. A small decline has occurred in recent years, with the proportion reaching 28 percent in 1968.

These recent decreases in size of labor force and proportion hired are apparently due to the fact that when farmers lost some of their help they simply cut down operations a little bit, worked a little harder or leaned more heavily on family help. These data are strong evidence of the continuing dominance of the family farm in our agriculture. Not only is the family farm a tradition, but it has continued through the years as an economic reality.

The dominant change that has occurred on the family-size farm in recent decades is not the number of workers, but the almost spectacular increase in output per worker. The long-term trend has been upward, but the increase has been particularly large during the past two decades.

Editor's note — Although numbers of farms and total farm worker numbers have declined in New York State, output dollar volume has increased . . . and the Empire State ranks 13th among the 50 states in farm production.

This big edge inside gives you a big edge outside.

Note the exclusive steel cone that gives extra support where shaft joins side plate.

No other like-size forage harvester has a cutterhead like it.

First of all, it's big: 24 inches in diameter.

But most of all, it's strong. Behind each knife is a full-length steel plate, protecting the cutterhead from damage by foreign objects. The shaft is reinforced for longer life, and rides on sealed ball bearings.

With nine knives you'll chop to a uniform 3/16" —without a recutter screen and its costly horse-power requirements.

Capacity comes first, but this New Holland Super 717 gives a lot more:

- An exclusive 98° gearbox that keeps universal joints more in line to provide more efficient transfer of tractor power.
- A torsion-steel PTO shaft that can take peak power loads without strain.
- The only built-in knife sharpener with a sharpening stone that moves into place automatically to assure true bevel edges.

It adds up to a hard-working machine. Whether you're chopping corn silage (with a 1-row, 2-row or 2-row narrow head) or haylage (with the Super-Sweep windrow pickup) or standing grass crops (with the all-new sicklebar attachment).

That's what you'll have going for you just as soon as you get going—to your nearby New Holland dealer's.

New Holland Division of Sperry Rand.

Super 717 Forage Harvester: Closely spaced teeth on the Super-Sweep pickup get the short crop ordinary pickups miss.

SPERRY RAND™

NEW HOLLAND
Practical in design • dependable in action

Mastitis . . . . .

(Continued from page 6)

down" an inflamed udder. However, no drug can replace destroyed tissue, and may not even reach all the affected areas.

Also, the milk from treated quarters cannot be sold for periods varying from 48 to 72 hours or more. One of the chief disadvantages of drugs is that they tend to give you a false sense of security. They are likely to be most helpful when used under a veterinarian's directions.

Where can I learn more about mastitis?

The New York State College of Veterinary Medicine, with headquarters at Ithaca, New York, operates a mastitis control program with regional laboratories at East Aurora, Canton, Earlville, Amsterdam, and Kingston. A letter to the nearest laboratory will bring information about taking part in the control program along with more than 3,000 other dairymen. Connecticut also has a similar program. Write to the State College of Agriculture at Storrs.

Other state colleges in the Northeast are interested in giving available information to their dairymen. The New Jersey College is located at Rutgers; Pennsylvania at University Park; Massachusetts at Amherst; Vermont at Burlington; Maine at Orono and New Hampshire at Durham.

For information about your milking machine ask the dealer from whom you bought it, or the manufacturer.

Many dairymen are controlling mastitis by eternal vigilence in handling the herd and by following a rigid milking procedure. Others seem to be unable to do it, perhaps through carelessness or by under-estimating the enemy!

GENERATION GAP

PLANNING the transfer of the farm business from father to son avoids disagreements and lawsuits between family members, and can result in tax savings.

"Using a support contract to purchase the family farm has probably caused more family friction than any other type of transfer arrangement," says Arnon Allen, University of Wisconsin farm law specialist.

With this arrangement, the son gets title to the farm for a promise to support the parents until they die. There are some advantages to this arrangement. It is geared to the cost of living, the son knows the farm will be his, it saves probate costs, and it can provide the parents with peace of mind.

Disadvantages

However, the disadvantages of the support contract probably outweigh the advantages. It may lead to family disagreements, evaluation of services is difficult to compute for tax purposes, the son gambles that his parents will live only a normal life span, the parents become dependent on their son, and objections by the parents may cloud title to the real estate.

A good substitute for the support contract is the land contract. With this arrangement the parents still own the farm, but the son takes possession and he makes regular payments on the sale price. The son knows exactly what his obligation is, and when the payment is complete he knows he will get clear title to the farm.

The disadvantage of the land contract is that the parents have no cost-of-living protection, and if full payment for the farm is made before they die, they may be left without an income.

Mortgage

A third method of farm transfer is a deed with a mortgage to secure the installment payments. This method gives the son title to the farm. Since the son has title, it is easy for him to sell the farm when he wishes and pay off the parents in a lump sum.

If the son defaults in payments under a mortgage system, foreclosure time may take over a year. Much quicker action can be taken under a land contract.

When the parents want to be sure the son stays on the farm until their death, they can create a contract-to-will. Ordinary wills can be changed by the maker at any time. If a son makes certain promises or money payments, the parents can bind themselves by a contract committing them to will the farm to the son at death. Of course, the contract-to-will should be in writing.

Parents can sell or give a remainder interest to a son, keeping a life interest in the farm for themselves. Usually the son operates the farm as tenant until the parents die. This method assures the son that he will eventually get the farm, and it provides the parents with rent. Probate proceedings are avoided if the parents have no other property.

There are several disadvantages to this transfer arrangement. The son may sell his interest, and it is hard to value what the son is getting. Furthermore, if there is a dispute, neither the son's interest nor the parent's interest is easily salable.

Also, the son may not keep up or improve the farm if there is a year-to-year oral lease. A long-term written lease would prevent this. If the son receives his interest by gift, he may have to pay gift taxes and federal income tax on capital gains.

Parents can transfer their farm to a son with an escrow deed. This is an ordinary deed that has been left with a third person. When the parents die, the deed is delivered to the son. For this method to be effective, the parents must completely relinquish all control over the deed. If the parents make out a deed and keep it themselves, it is not recognized as effective. Making a will is a more certain method of property transfer than the escrow deed.

Forming a joint tenancy between the father and son is still another method of transferring the farm business. When the father dies, the son will owe inheritance tax figured on half the value of the farm business.

Few parents can afford to transfer the farm to a son as an outright gift. More parents make a gift to the son of part of the farm by selling it to him for less than market value. This gift may be subject to state gift tax. If the gift is made "in contemplation of death," a state inheritance tax may be due. There may also be federal gift and estate taxes on large gifts.

Have an attorney help you make out the final details of a farm transfer.

This DEKALB® dealer does more than talk about Sudax Brand

DeKalb dealer Nimmy Boston improves own soil with Sudax Brand for plow-down.

Nimmy Boston practices what he recommends to customers. He uses Sudax Brand to turn diverted acres into more profitable acres. It smothers weeds, prevents erosion, and conserves soil nutrients. Before corn harvest, Nimmy plows under the high tonnage green manure to improve soil tilth and water intake. He says:

"Neighbors were amazed how easily Sudax Brand plows under . . . and also at the top corn yields the next year." A neighbor agrees: "I can tell to the row the following year where Sudax Brand was plowed under. It produces better corn."

Take it from the dealer and farmers that use Sudax Brand. Plant it this year. Sudax Brand is a money maker on diverted acres and in any livestock feeding program.

It pays to see your DEKALB dealer today.

DEKALB SUDAX BRAND

"DEKALB" and "SUDAX" are registered brand names.

Personal Farm Experience

Gordon Donahoe finds silage feeding a breeze in a conventional barn with this mechanized silage cart.

HAYLAGE BONUS

Gordon and Glenn Donahoe, Frankfort, New York, feed only six 40-pound bales of hay each day to their 83 Registered Holstein cows . . . but they really fill 'em up with haylage (from 14×40 and 17×50 Harvestores) and corn silage (24×65 concrete stave). Haylage is fed once a day at a rate of 24 pounds per cow . . . corn silage fed twice daily at 75 pounds per cow per day. A self-unloading battery-powered silage cart makes the job quick and sweatless!

An unexpected bonus of the low-hay program has been that a considerable section (36×60 feet) of the barn floor above the cows has become available for equipment storage. And the milkpail reflects the expected bonus . . . the herd has gone from an average production of 13,190 pounds of milk per cow in 1957 up to 16,728 pounds currently. The Donahoes' father, Homer installed years ago one of the first 1000-gallon bulk tanks in their area . . . and the herd keeps it brimming on every-day pickup December through March.

The Donahoes use four milking units with a recently-installed around-the-barn pipeline . . . two units apiece. — *G.L.C.*

KETOSIS

The most pressing animal health problem mentioned by many dairymen . . . especially those with high-producing herds . . . is ketosis. F. David Davy of Fort Plain, New York, is one of those dairymen.

His 44-cow herd . . . although 20 were only two-year-olds . . . posted a herd average of 16,286 pounds of milk and 569 of fat. In fact, he had one two-year-old that gave 18,038 pounds of milk, 590 fat in 305 days . . . and another that produced 18,635 pounds 636 fat in the same length of time.

David feeds 65 to 70 pounds of corn silage per cow per day, plus 10 pounds of hay per cow . . . the hay fed twice each day, and silage once. He "lead feeds" grain . . . starting to move the grain throttle up even before a cow freshens . . . but finds it isn't very effective in preventing ketosis. The major arrow to his ketosis-prevention bow is the feeding of propylene glycol spread on top of corn silage.

For those cows that come down with ketosis in spite of everything, he treats with Azium . . . a cortisone product that has to be used with caution. Azium can cause a too-rapid breakdown of body tissues . . . it seems to "open the throttle" of the animal's metabolic processes.

The winter of 1967-'68 saw the first year of stepping corn silage feeding up to higher levels than heretofore in the Davy herd. "The cows did even better than I expected," is the way Dave sums up the experience. He feeds a 20-percent-protein grain ration to balance the lower protein levels of corn silage; this mix also has its calcium-phosphorous ratio adjusted for the relatively-low calcium level of corn silage. Each cow has access in the stanchion barn to a three-compartment mineral box containing blue salt, white salt, and dicalcium phosphate. — *G.L.C.*

FAST GROWER

If you want a fast-growing tree to plant on your back acres for a quick tree crop, then the answer may be the European larch. This exotic from Europe is a desirable tree for reforesting land in the northeastern and midwestern states as far west as Iowa.

Two-year seedlings planted on my property . . . The Laurens Forest in Otsego County, New York . . . were growing at a rate nearly two feet per year at the end of five years from planting. At six years this growth was verified by height measurements taken on 170 trees showing an average total growth of 10.8 feet . . . with many dominants reaching an annual leader growth of 3.4 feet.

The average diameter of 50 trees at 34 years of age, being some of the same 170 measured previously, was 8.8 inches at 4½ feet above ground level. A tree of this diameter measured 74 feet in total height.

European larch prefers cool, well-drained, loamy soils for its best development; sandy and gravelly soils are not favorable. It will tolerate a fairly-wide range of acidity.

Larch should be planted from seven to eight feet apart in pure or mixed stands. Plantations of Norway spruce or white pine at the ratio of one larch to three of the other trees makes a compatible stand. The larch, due to its fast growth, can be used to plant failed places in plantations . . . or open spaces on clear-cut hardwood areas.

At around 20 years of age, the best larch in a stand need crowns occupying one-half of the upper trunk, and these crowns should be exposed to as much sunlight as possible. This means that thinning out some of the trees to maintain this crown size will assure steady height and diameter growth.

European larch has many uses . . . principally for posts, poles and rough construction lumber. Planed boards make fine exterior and interior walls for camps and family rooms, as it takes stains and sealers for a beautiful finish. The small scattered knots are fully as attractive as knotty pine.

An old English adage that, "The larch tree will buy a horse before the oak will buy its saddle," has proven true at The Laurens Forest.—*Stuart S. Hunt, Forester, Syracuse, N.Y.*

FAMILY FARM

Twenty-three years ago I bought this crop farm. At that time I owned nine milk cows, a team of horses, an "H" tractor, and a hay wagon.

Now we keep 120 milkers, raise all our replacements, all our forage, and 70 percent of our daily ration. We grow no cash crops.

Much of our forage is stored in two large trenches, representing an investment of $2000. Our feeding equipment is a tractor scoop and a self-unloading wagon which fills the bunks for the milkers, dry stock, and heifers.

A 50-cow herd was my goal when I bought this farm. When I reached this goal I found I had to grow still larger and more efficient if I was to afford a family vacation, a college education for my five children, and investments in something besides the farm to provide a comfortable retirement.

I am now working for the goal of producing 1,000,000 pounds of milk per man on this family farm. — *Clarence Benson, East Lansing, N.Y.*

SUGAR BEETS

Harold and Rudy Kludt of Kendall, New York, grew 154 acres of sugar beets in 1968 . . . with an average yield of 24.4 tons per acre. They're planning on 160 acres this year.

They use a two-row beet harvester, and have three trucks for the eight-mile haul to the receiving station at Fancher. An eight-row standard corn and bean planter is used . . . the Kludts report that it works as well as the six-row precision planter they once used.

Fertilizer on beets is 1000 pounds per acre of 10-20-20, three-fourths of which is plowed down after being bulk-spread, and the rest put on by the planter. Some boron is included in the fertilizer . . . enough to spur beet growth, but not enough to trouble boron-sensitive snap beans in following years.

Peas usually follow beets; between 250 and 300 acres of peas are grown on this farm in a typical year. Beet planting started April 15 in '68, and they were in the ground in four days.

The Kludts used Ro-Neet weed killer on sugar beets, but also hired a Mexican family from Texas to hand-weed and hand-thin . . . at a cost averaging $18 per acre.

Harvest also started early last year . . . early in October after a rotary chopper had removed beet tops. Sugar content averaged 15 percent.

This is a sizable operation . . . in addition to sugar beets and peas, there were these crops last year: wheat, field corn, sweet corn, snap beans, hay, kraut cabbage, and cucumbers. In addition, Harold and Rudy buy yearling grade heifers and sell them for dairy purposes 4 to 6 weeks before freshening . . . there are 200 of these on hand most of the time.—*G.L.C.*

LIQUID MANURE

Any poultryman planning to install an underground liquid manure pit ought to build it with a slope on at least three sides, in the opinion of Ralph Friedman, Putnam Valley, N. Y.

"In this way sludge will flow to one spot in the pit where an auger can move it. Without the flow to a point where it can be augered, the sludge will build up, and then you have problems," he warns.

For part of his 20,000-bird operation, Ralph has 8-inch pits plus a 20′×20′×8′ underground storage pit. He uses mechanical scrapers in the rest of his operation.

"If a man has a good water supply so the sludge can be kept fluid then he can minimize the build-up. But if the water supply is limited, he can have trouble with an improperly built pit.

"There is no question that handling manure with a liquid arrangement is easier because it cuts labor. But it is likely we will have to do away with our liquid handling arrangement because of complaints from an ever-growing neighborhood," he notes. — *Bob Cudworth*

FLETCHER THE 4-H'R

"THANKS FOR THE ALLOWANCE INCREASE, DAD. DID YOU WANT THIS SNAPSHOT OF YOU BY THE KISSING BOOTH AT THE FAIR FOR A RECEIPT?"

Get healthy soybean profits with BONANZA!

You can't see hidden hunger in soybeans. Most soil tests can't tell you about it, either. But, you'll know at harvest time . . . when your yields, quality and profits are *down*. You can protect your soybeans from hidden hunger . . . and acute hunger . . . with Royster BONANZA.

Scientifically formulated for *your* area, Royster BONANZA contains all 13 primary plant foods, secondary plant foods and vital Trace Elements your crops must have for top yields, highest quality and biggest profits. None of these 13 plant food elements can substitute for another; your soybeans need them *all* . . . and get them with BONANZA.

BONANZA's exclusive formulation of Trace Elements resists both leaching and becoming fixed in the soil . . . making them available in the root zone all through the growing season.

See your Royster dealer for BONANZA, bag or bulk . . . or Royster Nitrogen, solid or solution. See him for custom application or the equipment to do it yourself. See your Royster dealer for soil testing and fertilizer recommendations. Your Royster dealer is a good man. When it comes to fertilizer, he knows his business . . . and *yours*.

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Royster Company, Norfolk, Va. 23501

SOIL TESTS SAVE MONEY

by Amos Kirby
New Jersey Editor

Testing soils for available supplies of nitrogen, phosphorus, potash, and even trace minerals is running neck and neck in New Jersey with lime. Thousands of soil tests are being made on fruit and vegetable soils to determine the amount of these elements that may be available for 1969 crops.

The College of Agriculture knows how many pounds of each major element are needed to produce about all of our major crops. If the tests show that there is available 25 pounds of nitrogen in the soil, and a crop calls for 100 pounds, there can be a saving of 25 pounds of nitrogen. And if the available supply already in the soil is ignored and the full 100 pounds applied, the surplus may be a loss . . . or the extra could produce an excess of vine or plant growth, and that in turn could lead to a delay in crop maturity.

Another advantage of soil tests is that by knowing the amount available in the soil, and that the crop may need more of any of the three major elements at a later stage in its growth, sidedressing or other methods of application can give top performance and still save on plant food.

SOYBEANS

Planning to grow soybeans in 1969? Want to know how to secure larger yields?

The answers to these two questions come from the Delmarva Soybean Conference held at Salisbury, Maryland. Reports from Delaware, Maryland, Virginia, Mississippi, Illinois and Iowa indicate that weed control, soil fertility, and water are the three basic ingredients to increase yields.

Weedkillers can mean the difference between a profitable crop or a loss. One must know the weeds on the land where the soybeans are to be planted; what kills one weed may have no effect on another. Soil moisture or the lack of it can increase or reduce yields. Irrigation helps, but there is the cost of applying water.

A question is soil fertility. Soybeans like a pH of 6 to 6.5. When it comes to fertilizers, there are no guideposts; all specialists recommend a fertile soil. If fertilizer is used, it should be applied to the cover crop that is plowed down the spring of planting.

How to break through the 25 to 30 bushel barrier is a complicated problem. Some Delaware growers are in the 35 to 45 bushel group, but it is due to a combination of factors, ranging from time of planting, soil fertility, moisture, and even varieties that may contribute an extra bushel here and there.

In light of present known factors, proper harvesting may add an extra bushel or two. One of the problems is shattering at time of harvesting. Dull cutter bars and too rapid movement of the reel result in bean losses. Harvesting in the morning when there is higher humidity results in better yields. Cracked beans due to improper harvesting result in as much as a 10 percent loss on grading.

Soybeans are becoming big business in New Jersey. In 1968, the Garden State grew about 45,000 acres, and produced its first one million bushel crop.

PEACHES

A breakthrough on brown rot on peaches appears on the horizon. Tests conducted by the New Jersey Agricultural College with accepted and new products show that damage may be reduced almost to the vanishing point even in unrefrigerated fruit.

Untreated fruit showed a 27 percent decay; Botram, a 25 percent loss; Captan and Botram a 15 percent loss; TBZ loss was down to 6 percent, and with 1991 was down to two-tenths of one percent.

There was no damage from 1991 on refrigerated fruit. The only drawback is that it has not been cleared for use by the Food and Drug Administration.

Bacterial Leaf Spot

There is nothing new on a control on the bacterial leaf spot on peaches. In 1968, South Jersey growers lost a half million due to the worst outbreak of leaf spot on record.

Specialists from the College of Agriculture report that bacteria enters the twig from mid-October to early November, and research continues to find a spray to control. Most damage is in orchards on light sandy soils, and less or none on the heavier peach soils. Growers are hopeful that 1969 may be a normal year, with the leaf spot remaining dormant through the season.

RUBBER MATS

A New Jersey county agricultural agent suggests that rubber mats in the dairy barn may reduce the bedding requirement by 50 percent.

While some bedding is still needed in the gutter and under the tail end of the cow, the rubber mats have been found to be an economy move. Only one thing to remember. In cutting the rubber mat there is a tendency for it to stretch, depending on the weight of the cow. Dairymen installing rubber mats may find it best to cut them a bit small, as they will soon stretch to cover the platform.

UPDATING WIRING

Having problems with electric lights and sluggish motors? The question may not be in the light bulbs or the motors; it may be that the wiring system needs updating.

If the wiring system is 10 or more years old, the chances are that the load has doubled in that time. Inadequate wiring or overloading can reduce voltage, resulting in a 10 percent loss in the electricity one buys, and at the same time may damage the electrical appliances.

HIGHER PRICES

A South Jersey cantaloupe grower has doubled the price for his melons by refrigerating them for 24 hours before shipping to market.

The cantaloupes are placed in cold storage at 40 degree temperatures. This removes the field heat, firms the flesh, and halts the ripening stage. The New York buyers pay him up to $5 a crate, compared with field run or unrefrigerated melons at $2 to $3 per crate. Retail merchants report a five-day shelf life on refrigerated cantaloupes, and they are willing to pay the price.

This grower thinks variety means little. He grows Gold Star, Burpee, and Saticoy . . . all hybrids . . . and the price is about the same on all varieties.

BUYING OR LEASING

Should I buy or lease my farm equipment? This is a question that might be studied these days in view of the need for new equipment that is not only more efficient but more costly.

On my recent trip to Hawaii, California, and Arizona, I found in talking with bankers and others that growers are thinking in terms of leasing rather than owning, and bankers are taking a close look at leasing instead of financing for the grower.

There are many things to be said for bank financing or leasing. Not all bankers look with favor on leasing, but it is growing. Financing trucks and automobiles is actually a form of leasing. Auto and truck operators are leasing equipment, and even tire distributors lease tires on big trucks and buses.

HOW LONG

Efficient dairymen are taking a close look at the number of minutes required to milk each cow. Can you milk a cow in five minutes, or does it involve ten minutes? What is your yardstick?

Here is a quick and simple way to determine this item. Multiply the number of milking machines you are using times the number of minutes you spend, then divide this by the number of cows milked. To milk 24 cows with two machines in 60 minutes averages out to five minutes per cow.

If your average is more than five minutes, better find out what is causing the delay. Maybe a part of the blame is due to the milking machine being in poor working condition, or perhaps the machine has been left on the cow after the milk flow has ceased. Try to keep it under five minutes.

A 35 PERCENT INCREASE

Read this before saying that it is impossible to get a 35 percent increase in milk production. Fred Lorenzo, senior agricultural agent in Warren County, has some often-overlooked facts. Last year, all cows in New Jersey averaged 10,300 pounds of milk. Those on DHIA averaged 12,877 pounds.

With milk at $5.50 per hundredweight, a DHIA herd of 50 cows will gross over $8,500 more annually than an untested herd of the same size, and testing costs amount to less than $400 per year.

Tall and tough...down and rank... makes no difference to a Mow/ditioner.

Avco New Idea's non-stop Mow/ditioner mows, conditions and windrows a clean 9-foot swath . . . just like a self-propelled, but at far less cost.

Talk about work savers! In a single pass around the field you can mow a full 9-foot swath, condition it, and leave it in swaths or windrows for speedy curing. As a result four things are dramatically reduced: field travel (up to 65%), man hours, operating costs . . . and soil compaction. Any of these is reason enough for a cost-conscious farmer to invest in this modern hay harvesting machine.

Positive, smoother feed to the rolls — even in heavy crops — results from the greater reach of the large, cam-actuated reel. Two full width rolls — one rubber, one fluted steel with tapered ends — provide just the right combination for non-plug, positive, yet gentle conditioning.

Quick-switch from swath to windrow, without removing any parts. Easy-to-make shield adjustment permits making light, fluffy windrows for rapid curing.

Versatile Cut/ditioner does everything right. Mows, conditions, and windrows when shields are installed. Excels in heavy, down and tangled hay. Your choice of 6- or 7-foot models, the Cut/ditioner will cut, regardless of how the hay lies. Also does a great job shredding corn stalks, cutting just about anything!

Selective conditioning. Knives cut only the stems of plants. After cutting, plants are accelerated over the rotor. This conditions the stems without damaging the leaves.

Choose the Mow/ditioner or the Cut/ditioner — whichever suits your farming practices best. They're just two of the ways New Idea helps make hay the way you want.

AVCO NEW IDEA FARM EQUIPMENT
Coldwater, Ohio 45828

BHL

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MANURE HANDLING

Dairyman John Dackowsky, Cassville (Oneida County), New York, is still in the process of making some changes in his dairy housing. He's added 160 feet to the length of the existing barn, and is using a poured (intensively reinforced and 8 inches thick) concrete tank measuring 12×40×60 feet to hold manure. Its nearly 200,000-gallon capacity holds a 100-day supply from his 124-cow herd . . . offering the possibility of spreading no manure during the tough-weather months of January, February, and March.

"I can work on manure cleaning whenever it fits the weather and the workload," John says. "Usually, I spread until Christmas, then start again in the spring when there is still enough frost in the ground to prevent severe rutting. The amount you can haul a day is governed by the distance you have to haul it."

Cleaner

The underground manure tank is filled with a conventional gutter cleaner that discharges at the middle of the pit wall at the rear of the barn with only a conventional six-foot extension. With a barn nearly 300 feet long, Jack was concerned about the load on the continuous-chain gutter cleaner, so he put extra idler wheels at one end to widen the arc so the chain wouldn't come around a right angle. He also cleans twice a day to keep the load level low.

Gutters are 16 inches wide, and 16 inches deep . . . with no slope in the bottom. Cows don't like to step back over a gutter with these dimensions, John reports, but he's building grates to cover them . . . of ⅝-inch rods (20 feet long) that are 2.25 inches apart on center. Gutters were built this large so they could be water-flushed someday if he decided to go this direction . . . and also to allow enough room for movement of the manure under the grates.

The big tank is covered with "Dox Planks," each 20 feet long. These are made of cement blocks strung together with two ¾-inch reinforcing rods. They are butted together in the middle of the cover and rest on an 18-inch beam, 60 feet long, which is supported by three poured-concrete 12-inch columns. Eventually, John plans to pour 4-5 inches of concrete, reinforced with 6×6 mesh, on top of the Dox Planks to completely seal the pit and also to be able to drive the tractor and spreader on it.

Cost

The cost of the holding tank with accompanying unloader pump and 1500-gallon spreading tank, was just about the same as one of the two 30×60 silos and silage unloaders that stand nearby. One of the silos is filled with corn silage and the other with haylage.

The manufacturer claims that the 2 silos have a capacity of 3000 tons. John says, "I don't know how much they hold, but my wife and I fill them to the roof every year and we haven't emptied either one of them yet!"

The Dackowskys have 225 acres of tillable land which are all laid out in strips, as the farm is hilly with gravelly loam soils that wash easily. It takes 90-100 acres of corn and about 80 acres of hay to fill the two silos. They plan to start growing corn for grain in 1969, replacing the small grains.

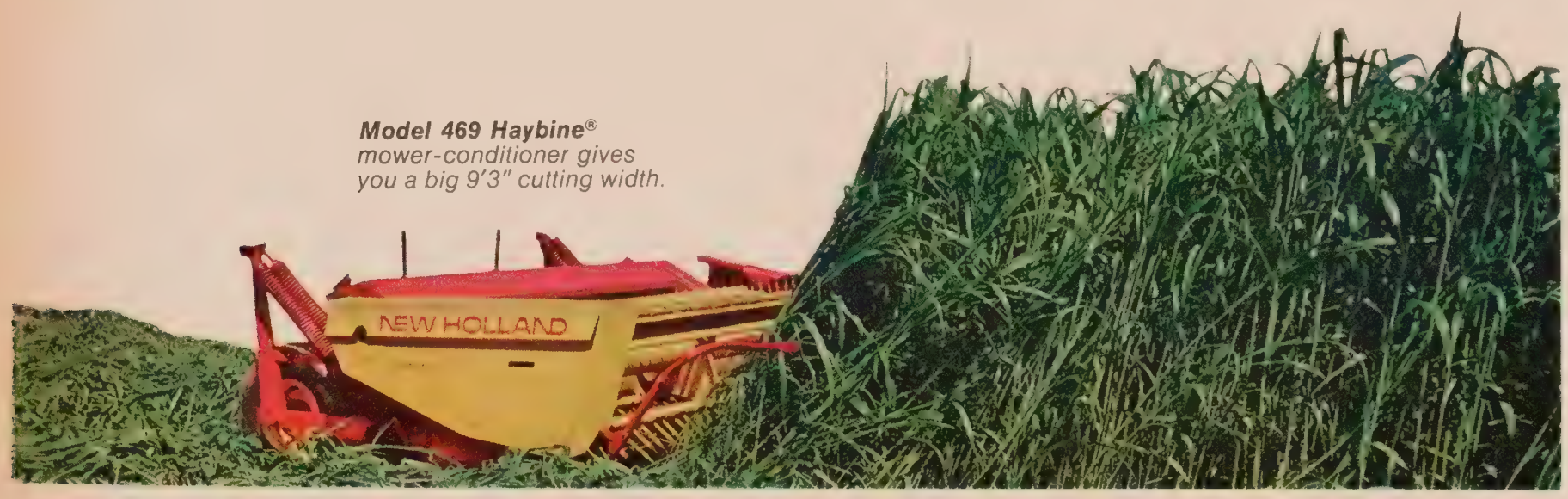
Plowing is done with a 12-foot disc harrow or a 6-bottom automatic reset plow pulled by a four-wheel-drive tractor.

There's another silo (16×40) that will eventually be used for high-moisture corn grain. No hay is being fed now, and Jack reports a preference for corn silage over haylage. Cows are arranged head-to-head, and a silage distributor working from an overhead track between the rows of cows eliminates silage carts and forks.

Chopped hay and straw are used for bedding in the tie stalls, as are wood shavings. Jack comments, "We ran some pen-manure with unchopped straw into the tank one time, but found

(Continued on next page)

John Dackowsky prepares to hook in the pipeline from the milking parlor to his 1200-gallon vacuum bulk tank.



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A whole new line of mower-conditioners from the people who started it all.

Model 467 *cuts a swath 7'3" wide.*

- The cutterbar cuts at 1,560 strokes per minute, so that it slices cleanly through everything the big reel sweeps in.
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- The strong new drive line is raised high off the ground, up and away from dust and crop.
- The two-way suspension header (on 9-foot models only) lets each end "float" independently to follow terrain closely, cut more crop, reduce damage to cutterbar.

When you see these Haybine mower-conditioners close up, you'll know why they're the top choice of farmers everywhere.

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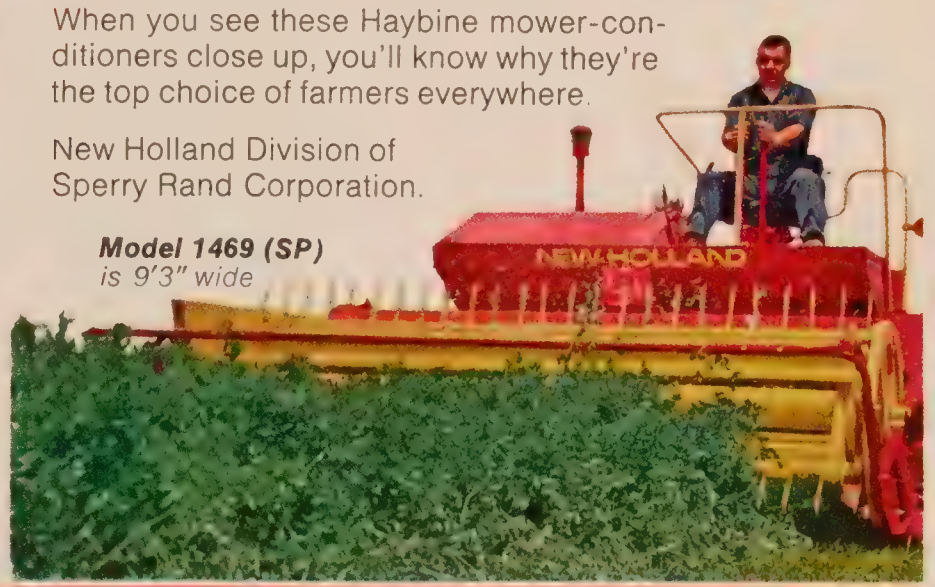
Be sure to see New Holland before you make a move!

There are a lot of mower-conditioners on the market today. But if you want the "real thing"...the original pull-type mower-conditioner...the one-and-only *Haybine*...the only place you'll find it is at your New Holland dealer's.

The fact is, he'll show you not one, but three brand-new Haybine mower-conditioners this year: a 7-footer and two 9-footers. There's a size just right for you.

And each is "New Holland" through and through — broad-shouldered and big-muscled to take tough crops in stride.



Model 1469 (SP) *is 9'3" wide*

SPERRY RAND™

NEW HOLLAND
Practical in design · dependable in action

FOR THE BIRDS

Cleon Shuster of Seneca Falls, New York, has used carbide exploders for five years to protect his corn from blackbirds. "We got to the point where it looked like we'd have to quit growing corn," he reports. The federal Montezuma Wildlife Refuge is just a whoop and holler down the road . . . and there are thousands of hungry blackbirds swarming out of this taxpayer-financed rookery.

Starting around the middle of August, and continuing into November, Cleon bangs away with 5 exploders from dawn to night time. "Start **before** birds get to working in the corn," is his advice.

The carbide exploders . . . generating acetylene gas for the big bang . . . must be serviced each morning. After being started, they continue on their own until they run out of calcium carbide that night. Some neighbors have bottled gas exploders . . . perhaps 20 percent of the devices in the area, Cleon reports.

The device Cleon uses costs about $75 for each, and each one can protect from 7 to 10 acres, depending on the "echo-potential" of the field and its surroundings. When corn-silage harvest begins in the area, Cleon braces for extra battle because blackbirds are being driven out of other cornfields by the noise of harvest equipment. Each exploder is set on top of an oil drum at the Shuster farm, but the drum is not involved in beefing up the noise, as in some cases.

Coons, deer, and species of birds other than the blackbird family don't seem to mind the noise, Cleon reports. As long as the blackbirds stay away, though, farmers in the area are happy with the noisemakers.—*G.L.C.*

Cornell student Rodger Beck looks at an ear of corn stripped by blackbirds in a field near Geneva, New York. Practically every ear had been attacked; damage amounted to 50-60 percent.

Manure Handling . . . . .

(Continued from page 14)

it was just too hard to get it mixed up so it would pump well. It takes at least 40 horses under the tractor hood to get the tank stirred up into a slurry by the stream being blasted into the tank by the pump."

Generator

Speaking of horsepower, the Dackowsky farm has a 400-amp electrical entrance . . . and a 30 K.W. auxiliary PTO generator to take over some of the load if the power line goes out temporarily. The latter has been used 16 hours here during the last year.

Some other building and equipment details: the milking complex (located alongside the middle of the barn) has six inches of insulation in sidewalls and ceiling . . . two inches of insulation in sidewalls, and four in ceiling of barn . . . a 1200-gallon Zero bulk tank stores milk. Water goes from the double-six milking parlor, milk room, and utility room into the manure tank via a sludge pump that sits in the bottom of a 36-inch by 12-foot well alongside the pit.

The herd is divided into four sections and, after milking, each section goes back to its respective part of the barn. The Dackowskys' goal is to produce 3 tons of milk a day, and they're two-thirds of the way there!

If the Dackowskys decide to go the free stall route, all they need to do is leave the neck chains of the tie stalls unfastened. There are a number of flexibilities . . . more than one alternative . . . built into this setup. — *G.L.C.*

What did his DEKALB® dealer just tell him about XL's?

That they're great dual-purpose hybrids. Plant XL Corn for productive, economical, high-energy silage with plenty of grain and juicy green leaves. Or go for top grain yields with DeKalb XL's. Last year, New York farmers made authenticated yields of 183, 177 and 168 bushels* with single cross XL-45; 158 and 150 bushels* with XL-315; and 148 bushels* with XL-316. Go with these and other outstanding XL's—the great, tough *Powerplants*—bred to thrive under thick planting and high fertility. See your DeKalb dealer now, while he can still fill your complete XL corn order.

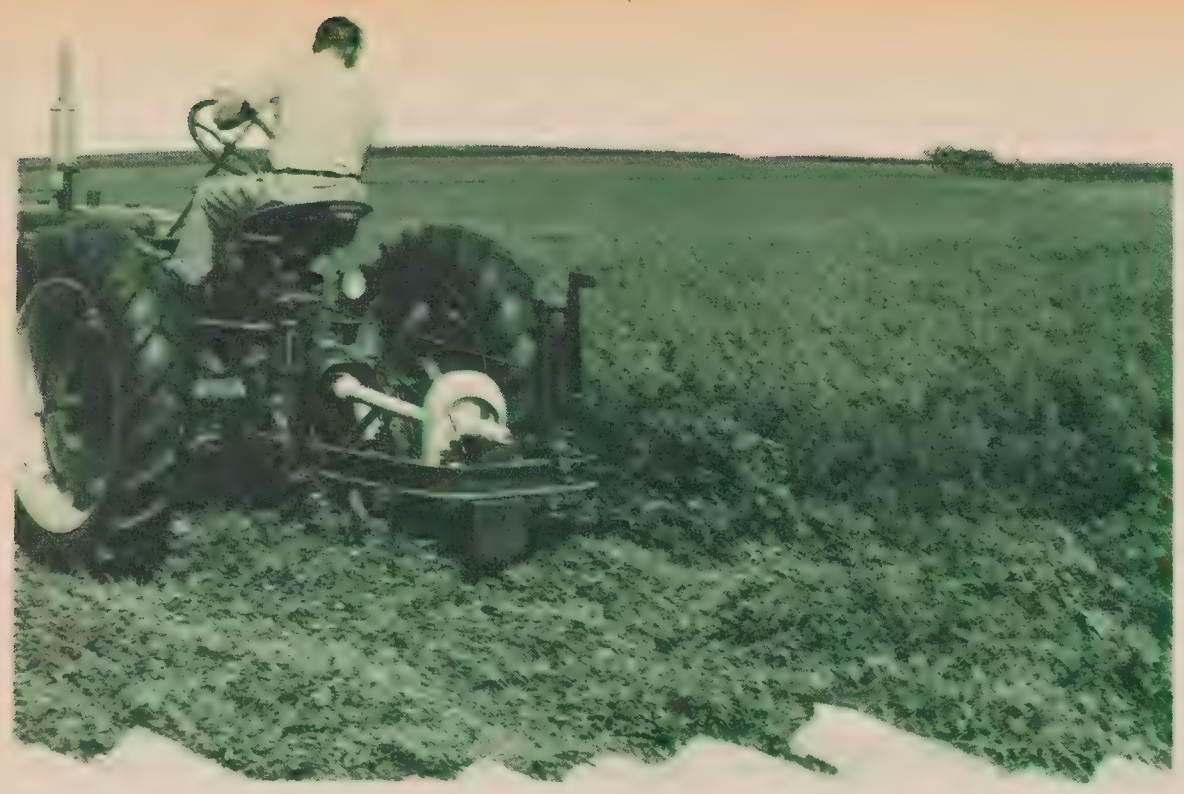
DEKALB XL POWERPLANTS

"DeKalb" is a registered brand name. "XL" is a variety designation.

It pays to see your DeKalb dealer today.

DEKALB

*Mechanically harvested, without gleaning from measured acreages; verified by impartial witnesses, and figured from scale tickets to No. 2 corn.



DON'T NURSE A SEEDING

PART TWO

by John Baylor*

THUS far I have reviewed seeding principles, that, with the exception of packer wheels, Gil Hartung and his neighbors may have considered 20 years ago.

Now let's look at the one main practice that set Gil's field off from all of the others. He **eliminated** the **competition** from other crops!

We know that the severe competition of other crops, or of weeds, for light, moisture, and nutrients can be very detrimental to the development of tiny forage seedlings. High temperatures may, likewise, have an adverse effect on the early growth of legume and grass plants.

Seedlings of the various species differ in their ability to compete with other plants for light, nutrients and other needs. But all are affected to some degree.

Here's how seedlings are affected by competition:

Moisture

Seedlings of all common legume and grass species are unfavorably affected by intense shading. Normally, root growth is affected more severely by reduced light intensity than tops.

For example, in a greenhouse study with birdsfoot trefoil, root growth was reduced by over 90 percent under heavy shading similar to that occurring at the time small grains head out. As a result, these tiny plants grown under shade are likely to be less drought-tolerant and more subject to other stresses during drought periods.

Of the legumes, red clover is most tolerant of shade, followed by alfalfa and ladino clover. Birdsfoot trefoil is most seriously affected by reduced light.

As with light, there is a general reduction in the growth of tops and roots of all species with decreasing soil moisture. Compared to light, however, the percentage decrease for tops and roots with decreasing soil moisture appears to be similar.

In general, growth rates of both legume and grass seedlings decline at temperatures higher than 65-75 degrees F. . . . probably as a result of a depletion of carbohydrates within the plant. Likewise, when temperatures drop below 50 degrees F., legume growth and nodulation may be reduced.

Chemicals Pave Way

Despite the above knowledge, until relatively recently many northeastern dairymen considered it impractical to spring-seed alfalfa and other species without oats. "We need the oats," "too many weeds," or "costs too much to spray" were arguments frequently cited.

But, except under unusual circumstances, these arguments are no longer valid.

For example, research studies and farmer experiences alike show that if a high yield of quality hay is your goal, including three or more tons of hay the year of seeding, sowing in early spring without oats is your best bet. If weeds are a problem, newer chemicals properly applied will do the job of taking them out. While the actual initial cost may be higher, the extra hay more than pays the bill.

In northeastern states, two chemicals . . . Eptam and 4(2,4-D) Butyric amine . . . have been especially effective.

Eptam is excellent for the control of most annual broadleaf weeds and annual grasses such as foxtail. It must be applied on a dry surface and worked in **immediately** before planting. Three pounds of active Eptam in 20-40 gallons of water per acre is generally sufficient.

Eptam is your best bet if annual grassy weeds are your problem. But, remember, Eptam will also knock out seeded grasses such as timothy.

For broadleaf weeds, ¾ to 1 pound per acre of 4(2,4-D) Butyric amine applied in 5-15 gallons of water when weeds are less than 3 inches tall does an excellent job. Effective on seedlings of curled and yellow dock and most annual broadleaf weeds, 4(2,4-D)B will not kill wild mustard, wild radish over 2 inches tall, or annual grasses.

Fields treated with 4(2,4-D)B should not be grazed or mowed for at least 30 days following treatment.

Benefin (Balan), a preplant material used with excellent results in the Midwest for both grasses and broadleaf weeds, has been only partially effective in Eastern trials.

When weeds are a problem in spring seedings made without a companion crop and not properly sprayed, wait until the weeds are 2 to 3 feet tall. Then, clip low to kill the weeds. The forages will recover from crown buds regardless of the height clipped. However, if not clipped low, the weeds will also recover from the live buds on the weed stubble.

To sum up the high points on spring seeding, here are the steps to follow:

1. Lime and fertilize according to soil tests to eliminate nutrient deficiencies.
2. Plow early and prepare a firm seedbed.
3. Match the crop to the soil.
3. Plant as early as possible. A delay in planting will reduce plant vigor and seeding-year yields.
5. Eliminate the oats . . . except where erosion is a severe problem. Where oats must be used, reduce its seeding rate by at least one-half.
6. For top seeding-year yields, increase forage crop seeding rates. Recent studies in New York and elsewhere show that alfalfa seeding rates of 18-20 pounds per acre resulted in the highest yields the year of seeding and the following year. Similar results from above-normal seeding rates might be expected with other legume species.
7. Control troublesome weeds with chemicals.
8. Control problem insects. Potato leafhopper can be expecially tough on new seedings of alfalfa and birdsfoot trefoil.
9. With legumes, remove the first hay crop when they reach the early bloom stage of growth . . . by early to mid-July for alfalfa, slightly later for trefoil.

Farmer's Experience

To wind up everything we have discussed, let's take a look at the seeding experiences of one Central Pennsylvania dairyman.

John Rodgers farms more than 1200 acres in Mifflin County's Big Valley. Of this, some 550 acres are planted to alfalfa or alfalfa-grass mixtures. Nearly 150 acres are established annually.

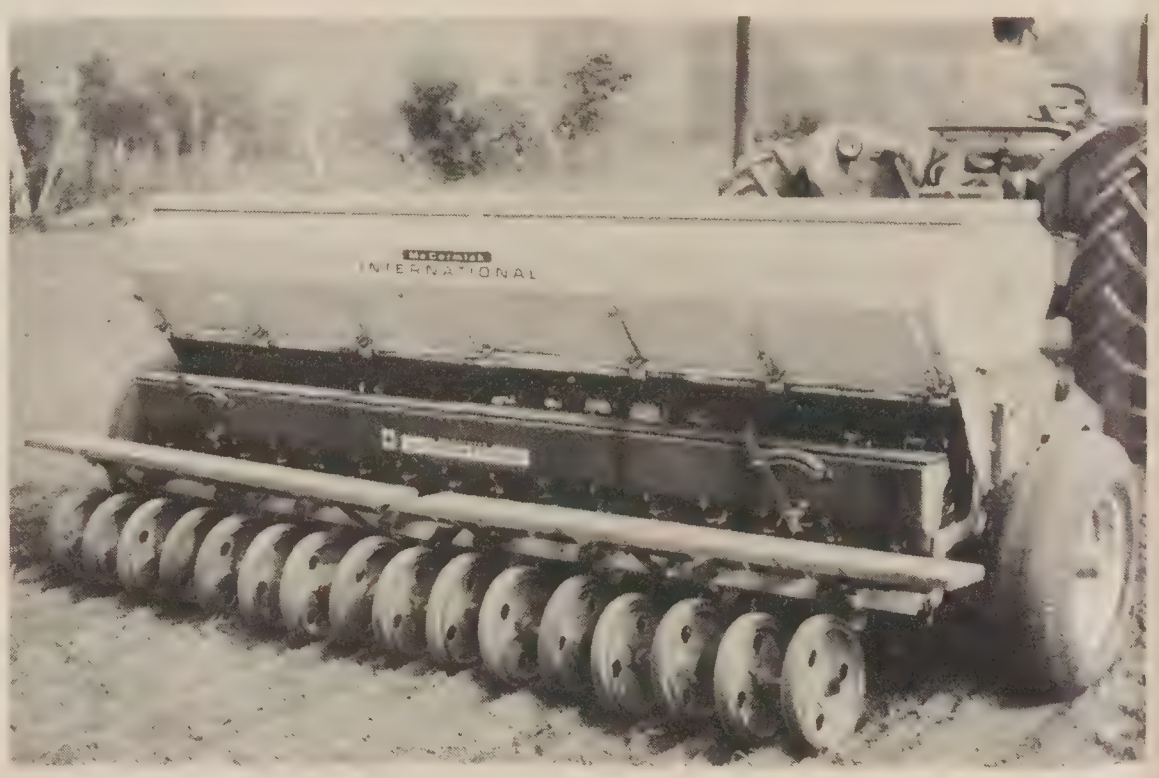
This progressive young dairyman has traditionally used the most up-to-date farming practices as described in this article. Spring seedings, band seeded without a companion crop, were first started in 1964. Broadleaf weeds were controlled with 4(2,4-D)B except on fields where nutgrass and foxtail were problems. On these fields, Eptam was used. Results have always been satisfactory.

Says John, "I can't afford to chance a nurse crop. It's simple dollars and cents. With over $75 per acre tied up in land preparation, seed, fertilizer, etc., I need good stands of alfalfa consistently."

In 1966, a packer-wheel drill became a part of John's seeding equipment. Since then, all seedings on his farm have been made using this drill. "Even in dry seasons, we've ended up with excellent stands. This drill has been excellent for all legumes and grasses, including orchardgrass and bromegrass," John told me.

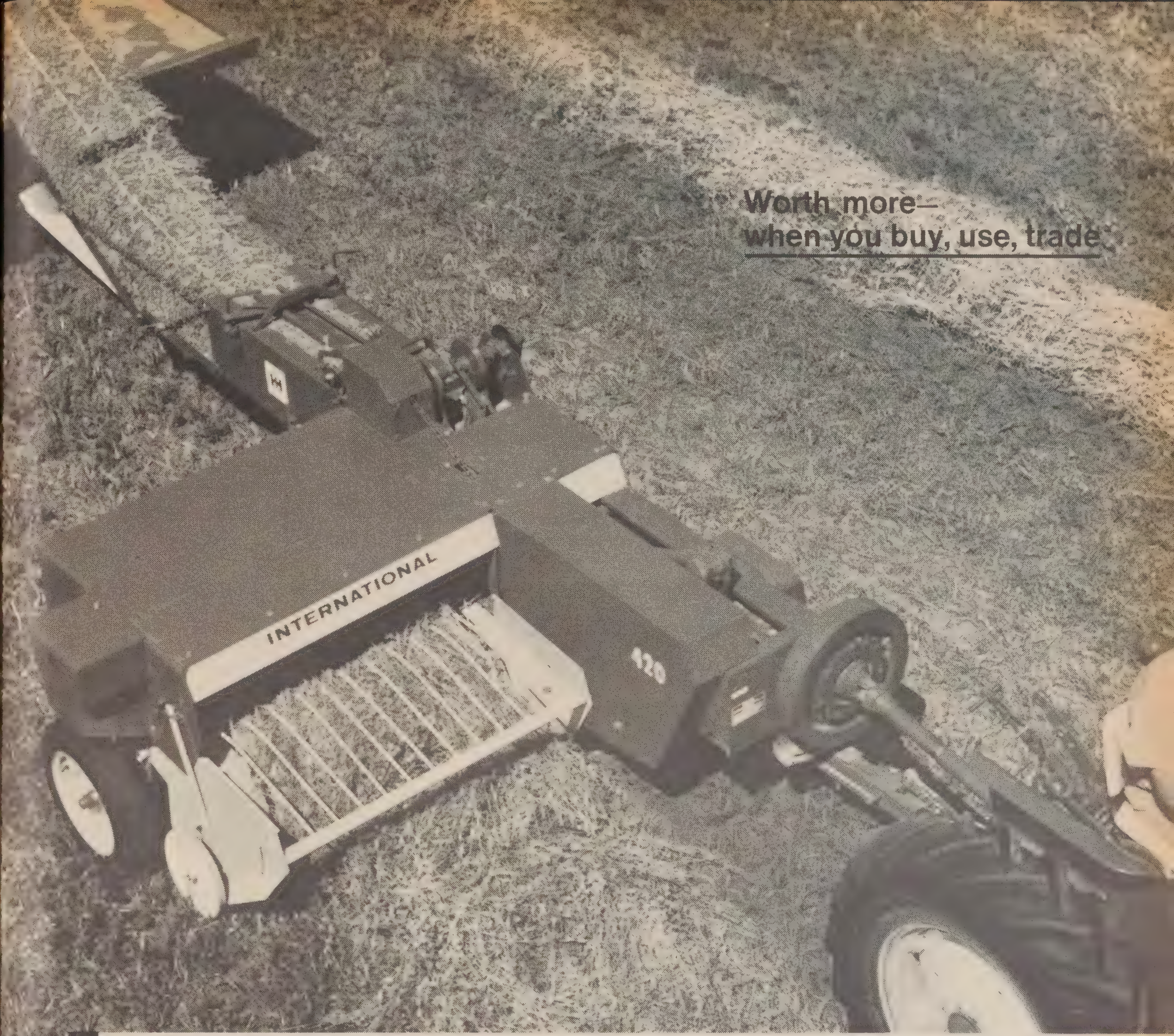
It isn't likely that John Rodgers will go back to seeding his alfalfa and birdsfoot trefoil in oats!

Chances are if you make a direct seeding this spring, and do a good job of controlling weeds chemically, you will keep oats out of all future legume seedings, too.



Packer wheels used with a band seeder provides additional insurance for good stands.

*Extension Agronomist, Penn State University



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Up to 15 tons per hour—all the extra capacity you'll ever need

Maybe this capacity figure sounds unusual—but the new 420 is an unusual baler. We know it will bale up to 15 tons per hour—because we've proved it in test after test, in every type of crop.

This huge capacity starts up front with the wide 55-inch pickup. Simple, fool-proof Shuttle-Glide feed has six packer fingers that sweep the feed table clean 75 times a minute. The whole husky power train and the exclusive 3-phase knotter were built for high-speed, big-job baling.

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And all this extra strength and capacity mean your new International baler will last longer with less downtime and fewer costly repairs.

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With Our ADVERTISERS

Does your silo need repair? There is a new specialized service available which offers trained workmen and modern equipment to clean and repair silo walls. They will sandblast to clean the inside wall of a silo, blow cement to reline old concrete wall and epoxy-coat to seal and protect new walls. Call or write Silo Services, Inc., Little Falls, New York 13365 for a free estimate.

Replacing two previous 10 and 12 hp models of compact tractors, Case now has the 10 hp Model 220, 12 hp Model 222, 12 hp Model 442 and the 14 hp Model 444. All models have the Case hydraulic system which Case describes as "a totally unique drive system in the compact tractor field."

Other standard equipment on all Performance King models include built-in dual headlights, foot brake, tool and storage compartment, full fenders, contoured seat, attachment lift lever, generator light or ammeter, footrests, and a spring-loaded parking brake latch.

A new kind of hay harvesting machine that automates bale handling has been introduced by New Holland. The new automatic bale wagon picks up, loads, transports and unloads bales.

Used with any tractor of 35 or more horsepower, the new Model 1010 Stackliner picks up bales from the field and automatically stacks them on its load rack. Then it transports them to storage, where it can unload its 55-bale load of hay as a single unit to build a continuous stack, or mechanically unload one bale at a time into the bale conveyor (see picture).

Other new developments by New Holland include the Model 467 Haybine mower-conditioner with seven-foot cut, and the Model 277 Hayliner baler designed specifically for unusually heavy crop conditions.

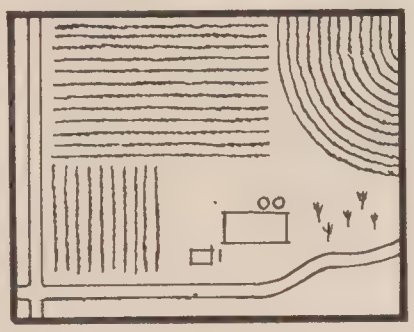
Ballad of Two Farmers

Richard B. Dymsza,
Cornell University

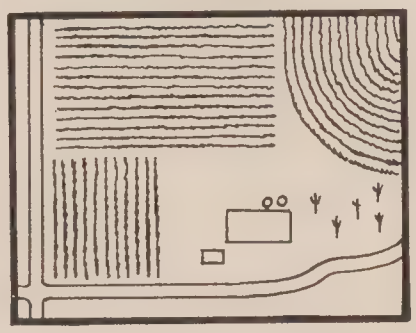
This is the ballad of Jones and McGee.
Both knew their farming from A to Z.
But each of them faced the challenge of time
In different ways, as told in this rhyme.

In the year nineteen hundred and sixty-nine
Their cows were many, their profits were fine:

Farmer Jones



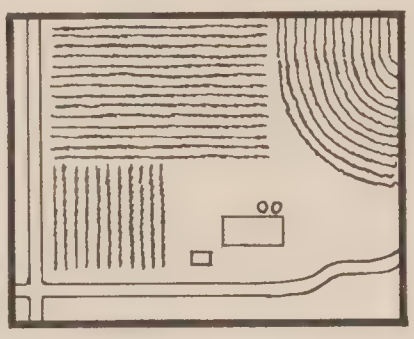
Farmer McGee



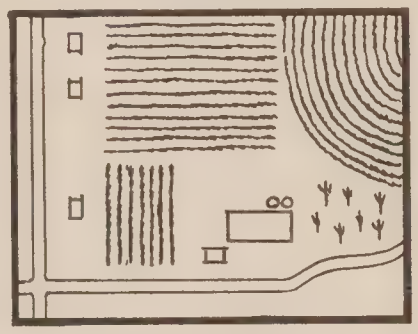
In the pictures above we can see the homes,
The barns and the fields of McGee and Jones.
The corn grew so tall and the air was so free
On the broad, good farms of Jones and McGee.

But in nineteen hundred and seventy-two
They saw urban sprawl approaching their view:

Farmer Jones



Farmer McGee



Now each had his way to battle the dread
Of mushrooming cities and suburban spread.
Farmer McGee said, "Let come what may!"
A fierce independence was this farmer's way.

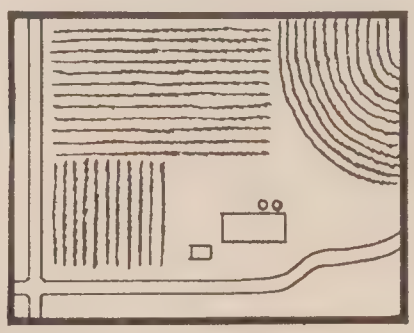
When men from the city knocked at his gate
To purchase some fields for a country estate,
By golly, McGee was a hasty reactor;
He sold the fields and bought a new tractor.

But when the same types approached farmer Jones,
Asking to purchase his cornfields for homes,
He answered, "No, thank you, I'll keep my ground."
Then off he marched to see others in town.

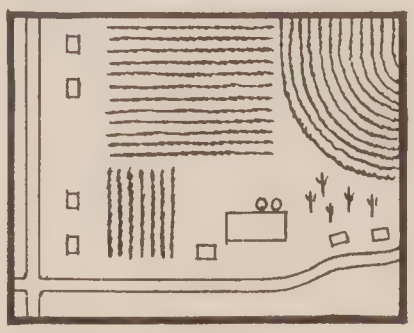
He called upon farmers, he saw the town board,
He suggested town planning, they were in accord:
The town must be planned before it starts growing,
Just as fields must be plowed before the sowing.

McGee's independence, in seventy-six,
Appears to have gotten his farm in a fix:

Farmer Jones



Farmer McGee



Farmer McGee has sold much of his tract,
Keeping the barn and some acres in back.
He used the spare cash to repair the old barn,
But the sales may have done less good than harm.

With all of the homes that had risen nearby
His property taxes had soared to the sky.
And this is, alas, what forced him to sell
The best of his pasture and cornfields as well.

To service the homes that were now in the town
Sewer and water lines were laid all around.
Adding insult to injury, McGee had to bear
A share of the cost of his unwelcome fare.

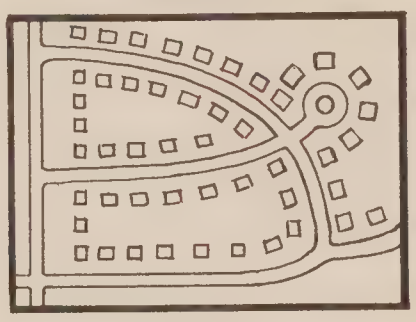
The neighbors at times to McGee were polite,
Ignoring his farm and its odors and sight.
But when the warm May brought "barnsmell" their way,
They talked and they squawked for day after day.

Since many small farms had gone into the red,
What was to come of this shrinking farmstead?
McGee gritted his teeth, he stiffened his lip,
And prepared himself to go down with the ship.

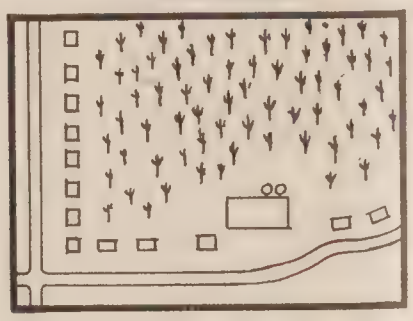
But good farmer Jones was still making hay,
And another big season was on its way.
No squeeze in taxes did this farmer feel.
His town had made plans against such a deal.

In the year nineteen eighty this ballad ends.
Let's see what's become of our farming friends:

Farmer Jones



Farmer McGee



Farmer McGee has stopped working his farm,
His fields left to weeds, to rats his barn.
With all of the houses built up on the street,
To parcel the inside will be quite a feat.

And smart farmer Jones, what's this fellow done?
Sold all of his land, for the right time had come.
Every last bit of it, hook, line and sinker,
To a subdivider, a dollar-bill thinker.

Now for a question: Of Jones and McGee,
Who of these two would you rather be?
The answer depends on your outlook and ways,
But here are some points that must be raised:

The farm of Jones, unlike that of McGee,
Produced 'till its sale to capacity.
Because his town's growth was planned so well,
Jones knew when to farm and when to sell.

No neighbors to nag him, low taxes too,
He was free to devote his attention to Moo.
And when he sold out, the price was just grand
On his fields, his pasture . . . on **all** of his land.

Last our thoughts turn to Farmer McGee,
Whose heroics will go down in history.
Alone this great farmer fought against sprawl,
But the odds were enough to make him crawl.

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WEEVIL AMMUNITION

by George G. Gyrisco*

BASICALLY, the control of the alfalfa weevil differs very little throughout the United States. In general the program includes the DDT-like compound, methoxychlor; the carbamate, carbaryl or Sevin; and the organo-phosphates: diazinon, Guthion, malathion, parathion, and methyl parathion plus various combinations of these materials.

The mixture of malathion plus methoxychlor is favored the most, probably because of its general success as well as its safety to man, bees, fish, wildlife, and livestock. Good to excellent control has been achieved with all of the listed insecticides in New York as well as throughout the United States. They will remain the weevil control in 1969, although local conditions will acually dictate which specific insecticide or combination is rated number one by individual experiment stations.

Timing

If one elects to treat alfalfa only once, timing is most critical and difficult. One can choose this timing according to percentage of tip injury, but in reality it is often largely farmer experience, guessing, or just being plain lucky when excellent control is achieved with one application per season. Realistically, alfalfa usually needs two treatments per season in most areas of the United States where infestations are severe.

In Tennessee, Dr. S.E. Bennett likes the simple recommendation "to treat when nearly all of the plants show signs of weevil feeding." In Ohio, Dr. Harry D. Niemczyk says apply the insecticides "when 25-75 percent of the tips or leaves of the crop are damaged." The USDA advises growers to treat "when most of the tips are beginning to show feeding. A second application may be necessary. If harvest infestation is severe, treat stubble as soon as crop is removed." These directions are typical of those in other states, including the Northeast.

Research in Ohio, Indiana, Kentucky and Illinois in 1968 indicated that the use of two applications of methyl parathion directed against the adult weevil very early in spring gave good control of the larvae, especially in those areas where infestations are principally from spring-laid eggs.

The two applications of insecticide were made 25 to 30 days apart by the Ohio scientists . . . starting either at a set calendar date, or arbitrarily when the first larvae are seen. Adult weevils are killed before the eggs are laid.

Incidentally, infestations in New York are also primarily from spring-laid eggs. While most phosphates, and in particular methyl parathion, are very effective against the adult weevils, carbaryl gives poor adult control and should never be used in situations where adult control is the main consideration.

New Insecticides

Currently two new insecticides appear to stand head and shoulders above others now being developed for alfalfa weevil control; these are Geigy Chemical's GS 13005 ("Supracide"), a phosphate, and NIA 10242 ("Furadan"), a carbamate of Niagara Chemical Company. These two not only give outstanding acute toxicity or control, but also give good residual toxicity and control.

In general, both insecticides have a longer period of biological activity in the field than most presently-recommended insecticides, and hence offer an advantage in that the timing of the treatment will be less critical and insect control will be at a higher level throughout the season. Neither of these insecticides is currently labeled, however, for grower usage for 1969.

Of all the parasites used in the U.S. against the alfalfa weevil, the most successful has been ***Bathyplectes curculionis.*** It has been most successful in the Western part of the United States. In the Northeast, a larval parasite ***Tetrastichus incertus*** has been introduced and has spread at a remarkable rate. It now covers most of the area infested by the alfalfa weevil in the Northeast. Its life cycle in New York is not well synchronized with the alfalfa weevil, however, and its impact on weevil infestations is not great.

Flaming and Oils

Two other control techniques employed in the United States are flaming and applications of toxic oils.

Flaming is recommended for alfalfa weevil control in Virginia, Tennessee, and Kentucky . . . and is suggested in other states of the South. A flame is used from the burning of LP-gas, and heat is momentarily applied with a special applicator to dormant alfalfa. The heat kills the eggs in the stem plus any of the other overwintering stages present. In addition, flaming is said to give good control of chickweed, shepherds' purse, sheep sorrel and other annual weeds.

The toxic oils of crude petroleum used experimentally at high gallonages act in the same way as flaming on the eggs and larvae as well as weeds. The use of oils show promise for the future, especially in conjunction with weed control.

In the northern part of the alfalfa weevil's range (including New York), however, nearly all of the eggs are laid in Spring after optimum time for flaming. Hence, fall or winter flaming . . . or even early spring flaming . . . kills few eggs or weevils. Even with flaming in the South, usually at least one application of insecticide is necessary to obtain adequate seasonal control of the alfalfa weevil.

Program for 1969

In northern and central New York, whenever possible, harvest the first crop of alfalfa for haylage or silage without any insecticide treatment. Haylage or silage, however, is only possible where growers are properly equipped to handle such crops.

In southern New York, particularly the lower Hudson Valley, weevil infestations often occur before the alfalfa has grown very much. In such cases a chemical treatment will often be needed on the first cutting. As a rough rule of thumb, treat when from one-third to one-half of the growing tips show signs of alfalfa weevil feeding.

When infestations are very heavy on the first cutting and remain untreated, an immediate treatment of the stubble will be necessary following the removal of the first crop. Insecticide treatments in New York usually start about June 10 in central and northern regions, and a week or two earlier in the lower Hudson Valley.

The alfalfa weevils are best treated by use of a low gallonage, weed-type sprayer set to apply about 20 gallons of spray per acre at 35-40 p.s.i. of pressure. Some companies will contract to spray the alfalfa for you either from ground equipment or from the air. Both methods of treatment when properly done will give excellent control.

Recommendations by Department of Entomology, Cornell University

Insects and timing of treatment	Chemical	Rate per acre in lbs of active ingredients	Tolerance in ppm	Remarks
ALFALFA INSECTS				
(1) **Alfalfa Weevil**				
Treat when 30–50% of alfalfa tips show some injury, or if tall enough, harvest and treat stubble as needed. Follow with second stubble application in 7 to 10 days	methoxychlor	1.5	100	Wait 7 days before feeding or cutting hay.
	plus malathion	1.25	135	
	methoxychlor plus Diazinon (Alfa-tox)	0.8–1.2 0.4–0.6	100 40	Must wait 7 days before feeding or cutting hay.
	methoxychlor	1.5	100	Wait 7 days before feeding or cutting hay.
	methyl parathion	0.5–1.0*	1.0	Same as parathion.
	Diazinon	1.5	40 on fresh alfalfa, 10 on hay	Do not graze livestock for 2 days following last application. Do not cut hay for 10 days after which time it may be fed to livestock. May be phytotoxic.
	carbaryl (Sevin)	1–1.5	100	No waiting period before feeding. Very toxic to bees. Often phytotoxic, follow label precautions. Do not treat fields with weeds in bloom.
	parathion	0.5	1.0	Wait 15 days before feeding or harvesting. Highly toxic to human beings. Must be applied only by a trained operator. May be phytotoxic.
	Guthion	0.5 for first cutting	2 on fresh forage 5 on hay	Wait 16 days before feeding or cutting hay. Do not use more than once per cutting. May be phytotoxic. Toxic to humans. Use with care.
		0.75 for stubble treatment	2 on fresh forage 5 on hay	Wait 21 days before feeding or cutting hay. Other restrictions same as above.
	malathion	1.25 ULV	135	No waiting period before feeding. May be grazed or harvested on day of application.

*Cornell University, Ithaca, New York

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CASE

Is Your Tractor a FUEL HOG?

DOES YOUR TRACTOR seem to be using too much fuel? Although amount of fuel consumed varies with different types of load, it pays to keep an eye on the general trend of fuel consumption. Even though you have no way of knowing exactly how much fuel a tractor should use on any particular load, you can observe such things as the number of hours of operation that can be obtained from a full tank of fuel. If this figure seems to be decreasing even on loads that are comparable, the possible cause of this extra fuel use should be investigated.

Fig 1—Fuel line leaks, even though very slight, are often a continuing source of fuel loss. Thus, even when the tractor isn't operating, fuel is being lost. The vibration of normal tractor operation is often enough to loosen the fittings slightly. Thus, it's a good idea to check and tighten these fittings periodically.

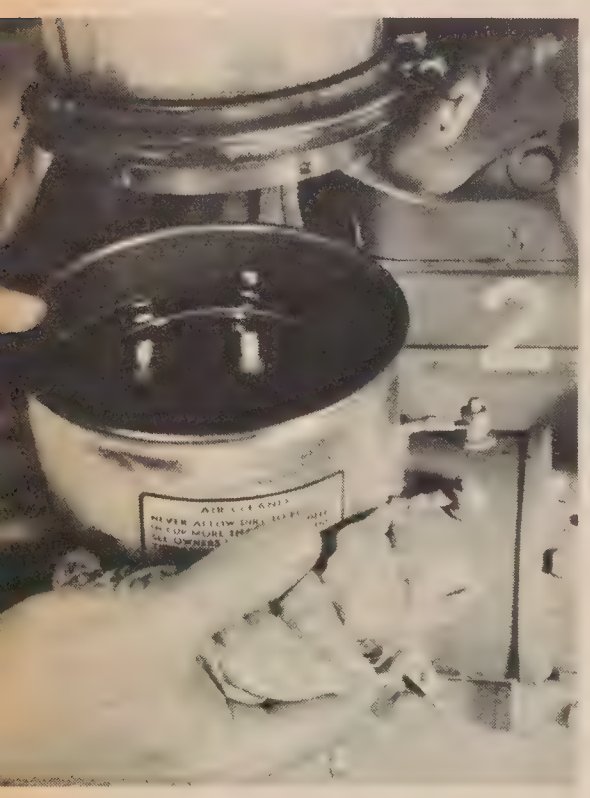


Fig. 2—Clogged air cleaner restricts the normal flow of air. This restriction makes the mixture richer and increases fuel consumption in spark-ignition engines. In diesel engines it can lead to more exhaust smoking than usual, as well as other signs of inefficient fuel use.

Fig. 3—Brakes should release fully when the pedals are released. Brakes that are adjusted too tight cause a continuous load which results in extra fuel consumption along with needless wear on the brake linings . . . a source of "double trouble" that calls for adjustment without delay.

Fig. 4—Crankcase oil weight must be right for good fuel economy. Oil that is too heavy imposes an extra drag on the working parts of the engine and produces, in effect, an extra load. The "right" weight varies according to the season, of course, with lighter oils for colder weather . . . and vice versa.

Fig. 5—Valve clearance controls the amount of fuel-air mixture entering the cylinder on spark-ignition engines. The valves must also form a gas-tight seal during the power stroke, and then open fully to permit the exhaust gases to escape from the cylinder on the exhaust stroke.

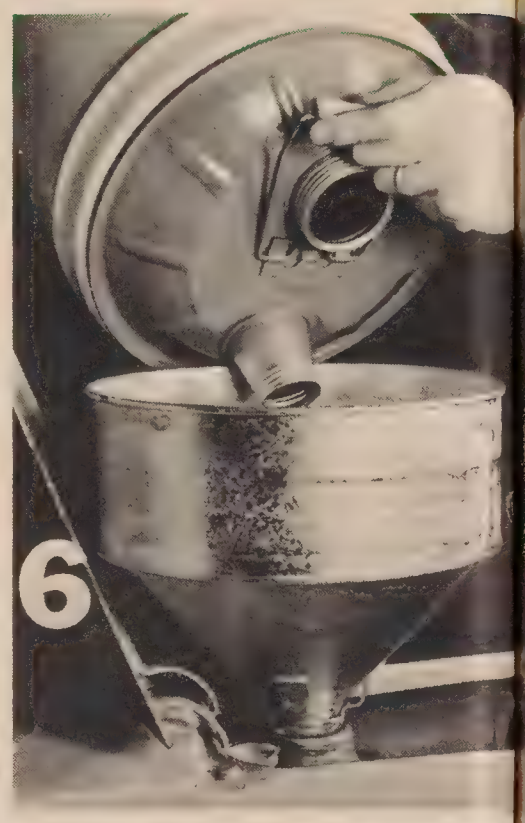


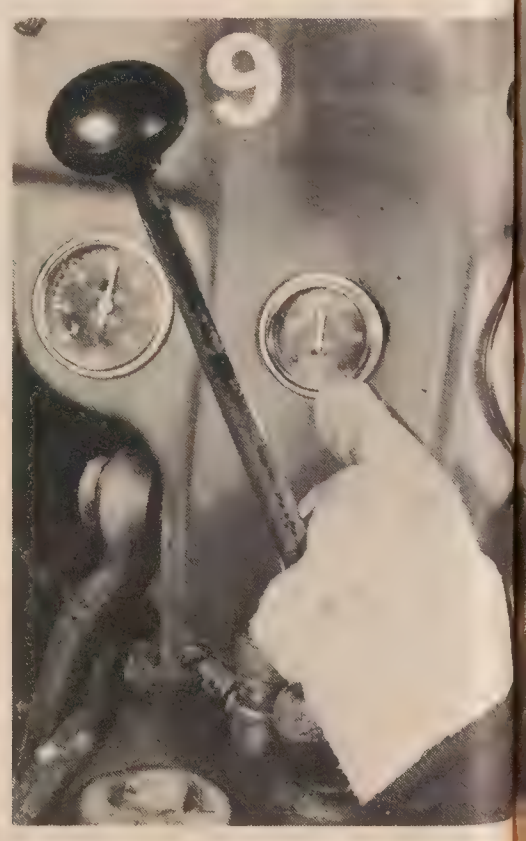
Fig. 6—Fuel grade and quality must be right . . . and "right" depends on the engine. Check the recommended fuel specifications in the tractor owner's manual. The cap on the tractor's gas tank should obviously be adequate to prevent undue evaporation, but this is not normally a major problem.

Fig. 7—Engine timing must be right if the fuel charge is to explode at just the right time for best performance. If the timing is too early in the cycle, severe knocking and engine damage may result. If the timing is too late, engine operation is smooth but fuel is wasted needlessly.

Fig. 8—Excessive engine speed wastes fuel as well as producing extra wear on the engine parts. Adjust the governor to obtain the recommended top engine speed. Then, when pulling a load use the highest gear ratio that permits the engine to run "unlabored," and throttle back to reduce engine speed.

Fig. 9—Operating temperatures must be within the correct range. Engine temperature that is either too high or too low increases fuel consumption, and causes unnecessary engine wear. Be sure to use a thermostat to keep the engine up to operating temperature. If the engine tends to overheat, check the cooling system.

Fig. 10—Spark plugs must be serviced . . . cleaned and regapped . . . at the recommended intervals to ensure an ample spark to ignite each fuel charge in a spark-ignition engine. Similarly, the injectors in a diesel engine must be cleaned at the recommended interval to ensure good diesel-engine performance.



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TOBACCO—there are no extra operations. Just add to your transplant water for pennies per acre. It controls wireworms and all other soil insects. Chlordane has an established residue tolerance of 0.3 parts per million on 47 raw vegetables and fruits. Take advantage of this modern agricultural chemical. Chlordane is the insecticide you can use on many more crops. Order it now!

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"There's absolutely nothing I have to do to keep this building looking good," he explained. "On my old barn, the roof had to be repaired twice since 1950. But we had a big windstorm since the new building went up, and you couldn't see those panels move a bit.

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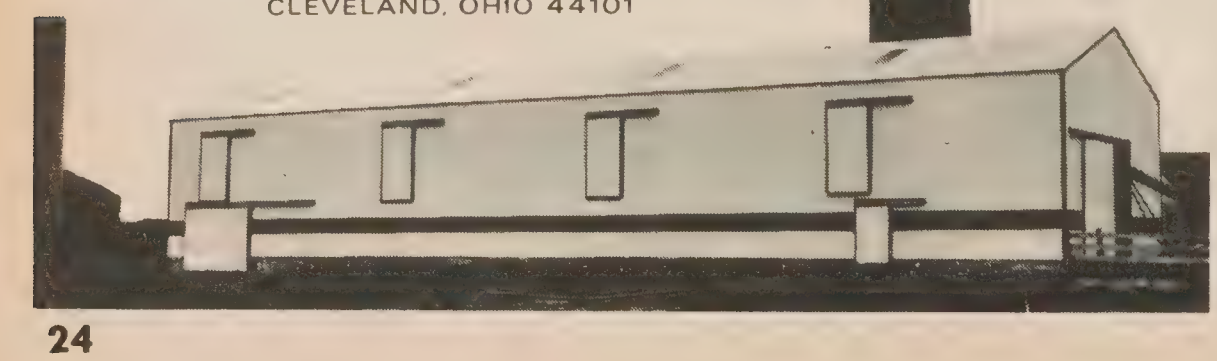
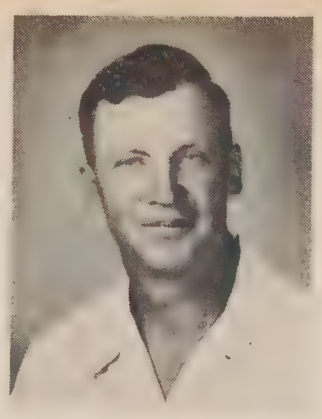




Gayway Farm Notes

by HAROLD HAWLEY

WHAT'S NEW?

One of the trends in agriculture which will likely continue, and which will change the appearance of many farmsteads, has begun to be apparent. It has to do with grain handling and storage equipment, especially for corn.

When corn was mostly picked and cribbed, new corn cribs were the order of the day, especially as farm size and corn acreage per farm increased. With the trend strongly toward combines for harvesting, new storage facilities are a must. To start with, in most areas there just isn't enough commercial drying equipment to handle the tonnage which can be harvested when the crop is ready.

Drying equipment on the farm has therefore become a must for many large growers, especially if they grow corn for sale. For those who feed their corn, the use of silos to store high-moisture corn has been a way to avoid the cost of drying equipment.

Some growers with corn to sell have even developed agreements with livestock men to supply corn to fill their silos with high-moisture corn. Naturally, this calls for good cordination so that the shelled grain gets ensiled fairly promptly. Where distances aren't too great, this is a natural!

For many other growers, dryers and bins are the "new investment opportunities" which means "that's where the money goes." As time goes on, it is a lead pipe cinch that more farmers with crops of their own to dry will provide a custom drying service for their neighbors.

In any event, the mechanical movement of grain from truck to holding tanks, to dryers, to storage, or back to a truck will result in a new look on many farms. The rather imposing array of augers, conveyors, pipes, bins, and dryers may be a mystery to many who drive by, but to those who have invested, or who will be investing, the whole array will be like some of the other complicated and costly equipment on modern farms.

Future Plans

At a recent meeting where this and other new equipment was discussed it was quite apparent that many farmers present felt that some kind of drying equipment was very much a part of their future plans. What was equally as important and evident was that a lot of potential buyers are going to take a hard look at the service potential of any outfit with whom they do business.

One man put it pretty well when he remarked that a fellow sure would be over a barrel when anything went wrong with any part of the whole grain handling, drying, storing equipment. He just better have a dealer who not only knows how to fix him up but who has the parts on hand. I might even venture the guess that the company who franchises only dealers who are service-minded and who backs them with a well-stocked parts warehouse, will be the outfit that will sell this specialized equipment whether it has the best equipment and price or not.

I can illustrate this by an experience we had recently. We were in the market for a fairly large and expensive machine. We checked with several farmers who owned one or another of the two or three brands we thought might be suitable. More than half the farmers were pleased with their machines, but said they wouldn't buy another one of that brand because their dealer or dealers did not carry an adequate parts inventory and the factory warehouse wasn't much better. The ability or lack of it to get parts and keep the machine moving was going to be the prime determinant as to who sold them their next machines.

EMOTIONS UNLIMITED

There are few surer ways of arousing people's emotions to the fever pitch than to even imply that a country as large as ours cannot support all the natural species of animal life that might ever have existed here. To imply that some species are unnecessary (not to mention undesirable) suggests that one would destroy that elusive "balance of nature".

While I have no special knowledge in this area, I subscribe to the notion that in nature predators feed on other species and keep their numbers in check so they don't exhaust their food supply. However, even the most naive person would admit that such a balance was a pretty rough and inaccurate affair, with variation in weather causing migrations, starvation, and wide swings in animal numbers.

Then along came man, changing the environment and exhibiting strong bias against some species of animals who killed his sheep or calves or ate his crops. Of course, this meant some wildlife suffered and some profited. For instance, in spite of the toll automobiles take on them, and because of the change in feed supply and the decreased pres-

(Continued on next page)

sure from predators, plus some common-sense control of hunting, we now have more deer in the Northeast than were here when nature was "all in balance".

The thing that got me going on all this was a pamphlet, "Defenders of Wildlife," which came through the mail recently. This almost hysterically criticised the trapping and poisoning of some predators. I quote, "More than 900 federally-appointed men spend our tax money trapping and poisoning our wildlife, frequently for the questionable benefit of a small minority of sheep growers and agriculturists". Maybe we should decide whether it's better to have wolves and coyotes or to have lamb chops and beef steaks.

More Important

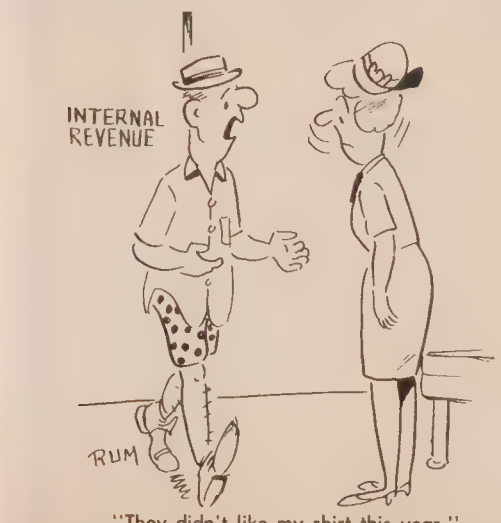
I recall when some of these government trappers pretty well eliminated the red fox in our area, along with the rabies he was carrying and spreading. The "small minority" that benefited from the control of that rabies threat somehow seem more important to me than the foxes that were killed.

Another little item this group calls to our attention is that the "unintelligent, unnecessary, and excessive use of insecticides, pesticides, or any poison may destroy wildlife ecosystems". In other words, let the crops go to the insects or to the weeds. Too bad these folks can't visualize how soon they might be hungry enough to be out hunting for a meal if everyone followed their line of thinking. They might even get to the point of upsetting a little balance of nature themselves if they got a wee bit hungry.

It bugs me how anyone can shed real tears over the death of such rascals as coyotes, wolves, mountain lions, alligators, badgers, etc. It's akin to the stupidity that prompts such hysteria whenever anyone mentions doing anything with some of our "forever wild" areas. The truth is that without some roads into these areas far too few people get to use such places. Sure, it's a crying shame to see what man will do to spoil primitive spots, but in a world like ours it's not sense to keep such areas for the very, very few who use them. Opening them up for controlled use by a large number of people would seem more realistic . . . but these same folks cry out in alarm at such a thought.

When you talk about letting wolves and lions and coyotes live to tailor the deer and elk herds to whatever the feed supply will support, it is as though one said that the wolves and coyotes are better judges of how many deer the area can support than are the Conservation Department people. All the Conservation Department has to do is change the length of the hunting seasons (as they now do) to control the size of the herds.

Sorry to be so darned practical, but I regard letting a bunch of predators follow a bunch of deer around to keep the herd trimmed to size as being about as foolish as to let a disease persist in a herd of cows (or people) to weed out the weak ones. There are better ways!



"They didn't like my shirt this year."

A LITTLE SOMETHING EXTRA

The disease in the elms here in this area is not only a real tragedy but is creating another non-productive job of some consequence. The dead and dying trees keep shedding limbs which break down fences and stop efforts to plow, cut hay, or whatever.

One of the jobs we are trying to get done before spring work starts is to clean up all such down limbs, and then to cut down all elms along the edge of the woods or anywhere else they are where they can fall into crop fields. Just another way to keep out of mischief!

What a pity so many millions of board feet of lumber will have to be burned just at a time when lumber is so scarce and high-priced.

We have been sitting tight on a bunch of standing hardwood lumber, thinking that the value of logs on the stump should show some considerable appreciation with lumber prices up 50 percent in the last few months. The local sawmills and loggers are doing "business as usual," meaning at about the same old price.

This shortage of lumber isn't going to evaporate overnight, so guess we'll just let the trees keep growing awhile longer. Maybe in a year or two somebody will need them badly enough to change their price schedules a little.

Treflan®. The mixed vegetable herbicide.

Treflan helps cut the time you spend battling weeds and grasses in over 20 different vegetable crops. You can save as much as 40 hours of hand hoeing and machine cultivation per acre with Treflan weed control. At $1.50 per acre, that alone could mean a saving of $60. Then, there are the better yields that usually follow reduced weed competition.

It all helps add up to better net profits for vegetable growers through more efficient weed control.

Treflan gets the worst types of weeds and grasses —all 27 of 'em—as they germinate. Before they can get above ground and start taking moisture, sunlight and nutrients from your vegetables.

Once Treflan is incorporated into the soil (preplant or postplant), it's there to stay as long as it's needed. Treflan works equally effectively in wet soil or dry. It's a natural for irrigated vegetables because it doesn't wash out, even in repeated irrigations.

You can shallow cultivate, if need be, to break the soil's crust or control resistant weeds without hurting Treflan's weed-killing effectiveness.

Treflan can now be applied by air. Incorporation can now be delayed up to 4 hours after application. For some vegetables, you can apply Treflan weeks before planting to spread out your workload. See your Treflan dealer about the proper time of application —preplant or postplant. It varies according to crop.

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So dependable, it's guaranteed.

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Ford 535 cuts, conditions and windrows a 9-ft. swath.

Five good reasons to make your new mower-conditioner Ford Blue.

1. No shear pins to change when time is important. No shear pins! New Ford 535 mower-conditioner is fully protected by two slip clutches and two overrunning clutches.

2. It's easy to make short turns and square corners thanks to the Ford 535's telescoping rear PTO section and long tongue.

3. Pick up tangled and down crops with ease. Reason: the Ford 535's 42-in. diameter, 4-bar reel adjusts forward and downward. Picks up lodged crops and directs them across a high-speed, clean-cutting sickle. Operates at more than 1,400 strokes per minute.

4. Floating header follows ground contour like a shadow. It's counterbalanced with two heavy coiled springs. Header raises easily to pass over obstructions, too, because it has only 50 lbs of weight on the pushbar when properly adjusted. Result: you avoid possible damage to cutterbar and conditioner rolls.

5. Both side shields adjust to form a smooth, fluffy windrow or set wide open to lay a full-width swath. This lets you vary windrow to crop density. A full-width crop deflector overhead is also adjustable, horizontally and vertically, to form quick curing windrows.

New Ford 535 mower-conditioner leads the market in value, durability and trouble-free performance. Come on in and let us write up a money-saving deal with easy-term financing tailored to your needs.

Ford Blue . . . your key to greater quality.

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TOMORROW'S SHOPPER

FARMERS are often told that they should be more consumer-oriented and less engrossed in production. Professor Max Brunk of Cornell University offers these ideas on what the food shopper of the future will be like:

1. Because she will have more money, be in a bigger hurry, and place an increasing value on her leisure time, she will demand an ever-increasing degree of service built into the food products she buys. She will consider the preparation of food as not much more than the responsibility of the one from whom she buys it. Her favor will turn to those who best fulfill that responsibility.

2. She will eat an increasing proportion of her meals away from home; this will alter her standards and broaden her demands.

3. She will seek a greater variety of foods with wide selections in price ranges, in package sizes, product flavors and brands. The flood of new products to the marketplace will continue to frustrate retailers, buyers, sellers, economists and regulatory agencies . . . but only delight the housewife.

4. The consumer of tomorrow will hold no blind allegiance to any industry, product or store. Because she is growing weary of inconsistent quality in both produce and meat she will demand that these industries give her meaningful and reliable brands, or other assurances of quality.

5. She will hold no fear of food substitutes. She knows she is adequately protected. Her only requirement of such products will be performance . . . performance in quality, reliability, convenience, prestige or what not . . . performance in all the attributes she seeks.

6. She will continue to be a bargain hunter, but her attention will increasingly turn to value rather than price in that quest. To this end she will avoid products that vary widely in price. She will avoid waste by insisting on both portion control and improved keeping qualities.

7. She will seek out prestige products and services that set her apart from her associates. For this same reason she will favor products that let her use her initiative . . . not as a kitchen slave, but rather as an artisan with food.

8. She will respond more to pleasure and enjoyment . . . and less to health and nutrition, which will be taken for granted.

9. She will expect an increasing amount of advice, protection and sympathy from food-regulatory agencies, whose actions will continue to frustrate industry effort to supply her constantly-changing demands.

NEW *Hy-Dro-Driv'n* FORAGE HANDLER!

WORLD'S FIRST HYDRAULICALLY DRIVEN FORAGE HANDLER

Grove introduces the first self-unloading forage body powered completely on the tractor's hydraulic system . . . No PTO shaft to hook-up . . . New drive provides fast, smooth, safe and trouble-free unloading . . . left/right or out the rear. Simple push/pull control knobs. Deck drag chain infinitely variable from slow through "sweep". Fewer mechanical parts greatly reduce upkeep. Write for details on the most modern forage body you can buy.

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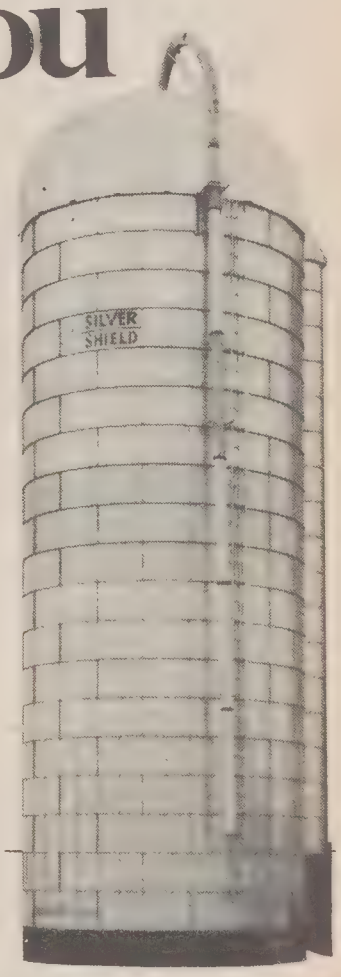
Sealed storage? Open storage? C&L gives you a choice



The Silver Shield silos are classed as open storage for forage crops, yet they give you many of the advantages of sealed storage. Tight walls, sealable doors, heavy duty top unloaders make the Silver Shield Silo the best investment in open storage.

Whether you are storing forages or drying and storing grain, your Clayton & Lambert dealer can assist you in planning a complete system. Contact him.

In the NEW ENGLAND area, write to:
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Send information on:
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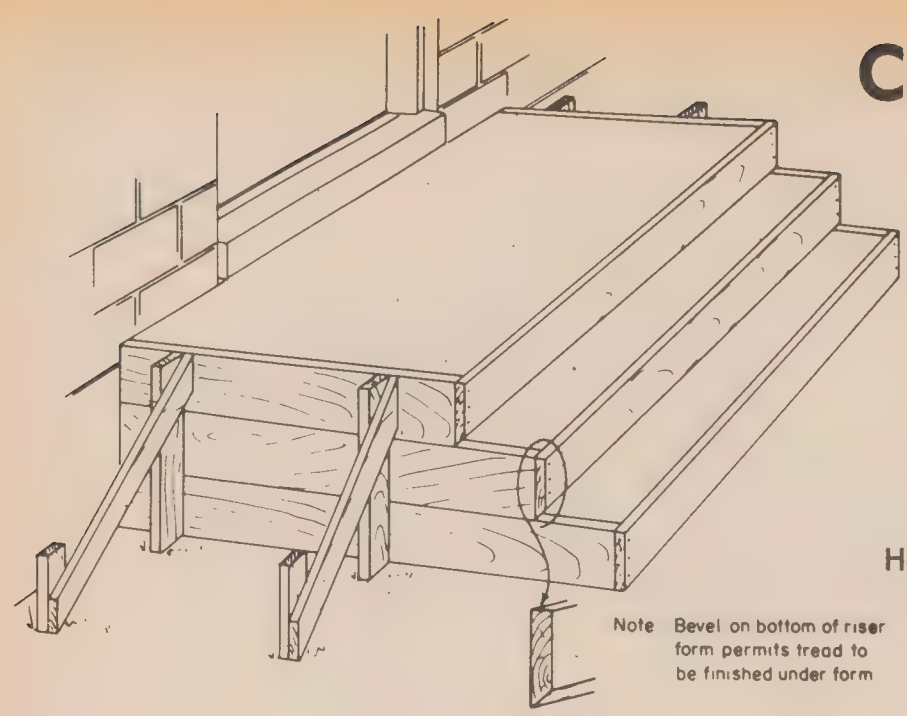
CONCRETE STEPS



How to form concrete steps.

CONCRETE steps can make the approach to a farm home safer and more attractive. They won't rot or sag, thereby becoming a hazard. Properly-built concrete steps are easy to keep clean. They are slip-proof in wet weather and do not require painting or other maintenance.

Concrete steps should be at least as wide as the approach leading up to them, and all risers should be exactly the same height. A landing is desirable to divide flights more than 5 feet high. For safety and convenience, the tread should be at least 11 inches wide, and all treads should be of the same width. The rise for each step should be not more than 7½ inches high. Allow a ⅛-inch pitch on each tread for drainage.

A simple form for steps is shown in the installation. Steps with long treads will require 2-inch-thick riser forms to keep from bending or bulging.

No Sink

An economical way to keep steps from sinking is to dig two postholes (6 or 8 inches in diameter) beneath the bottom tread. The holes must extend below the frost line and are filled with concrete. The top step or platform is tied to the existing wall with two or more metal anchors.

Forms are placed as shown, braced, and then oiled for easy removal. Well-tamped soil or granular fill may be used inside the forms to reduce the amount of concrete needed for the steps.

Right Mix

Always use quality concrete; the key is the amount of cement and water used in the mix. If you're mixing the concrete yourself . . . or you're going to order ready-mix . . . use concrete containing at least six sacks of cement per cubic yard and not more than six gallons of water per sack of cement. Be sure to use air-entrained concrete.

After the forms are braced, start placing concrete in the postholes and in the bottom of the forms. Use concrete that is not too wet. Fill the first step and spade the concrete thoroughly around the edges of the forms to compact it. Then proceed with the remaining steps.

Air Out

From time to time, tap the forms lightly to release air bubbles. Screed off the concrete at tread level and allow it to stand for 30 to 45 minutes.

Finish the treads with a float and then draw a soft-bristled push broom over the surface to make a nonskid-step surface. Use an edging tool to round off the front edge of the treads.

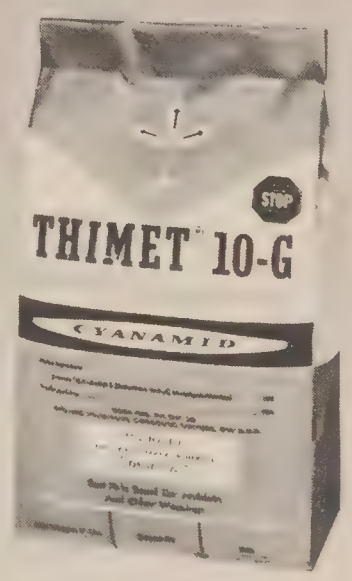
Moist-cure the concrete for at least five days. Then remove the forms and wire brush the steps to clean them.

For more information about the use of concrete on the farm and around the home, write to Dept. AA, Portland Cement Association, Old Orchard Road, Skokie, Illinois 60076.

Thimet 10-G knocks out insects that fight bean yields

Some growers have increased field bean yields by 15%, snap and lima yields up to 30%. How? By using Thimet® 10-G to control leafhoppers, aphids, thrips, mites, seed corn maggots and Mexican bean beetles. Thimet also helps stop bean mosaic and curly top by eliminating disease-carrying insects.

A true systemic insecticide applied in the row at planting time, Thimet moves up from the soil, protects the entire plant from inside. Stays with the plant throughout the insect season with no let-down in protection.



You'll like these other Thimet advantages, too:
- No drift, wash-away or blow-off problems;
- No effect on flavor, no residue in harvested crops when used at recommended rates;
- No danger to beneficial insects;
- No soil compaction from repeated use of spraying or dusting equipment.

Aim for bigger bean profits—end insect competition—with Thimet 10-G. Order now in handy 10- or 50-lb. bags from your pesticide supplier. *Before using any pesticide, stop and read the label.*

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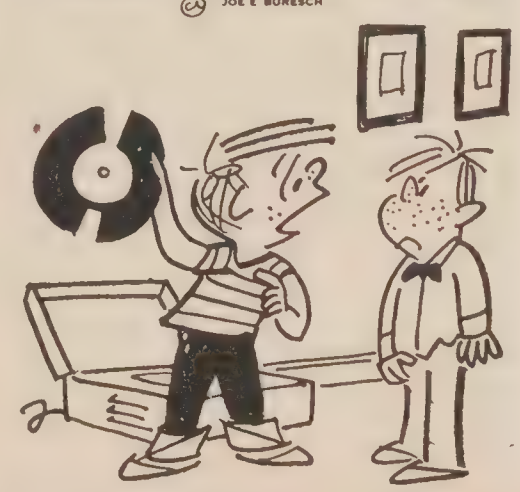

"This is a record that's in the top ten that drives my dad from the house to the barn!"

Dates to Remember

April 8 - Annual Meeting, New York State Guernsey Breeders Cooperative, Inc., Treadway Inn, Batavia, N.Y.

April 8-12 - 17th Annual Cattle Reproduction and Artificial Insemination Short Course, College of Agriculture, Storrs, Conn.

April 9-11 - Farm Materials Handling Exhibition, Chippewa Falls, Wisconsin.

April 11-12 - New York State Angus Association Annual Meeting and Sale, Cornell University, Ithaca, N.Y.

April 11-12 - New York State Black and White Sale and Show, Cortland, N.Y.

April 16 - Second Annual New England/Neppco Poultry Conference, Sheraton Yankee Drummer Motor Inn, near Auburn, Massachusetts.

April 19-25 - National 4-H Club Conference, Washington, D.C.

April 22-24 - Poultry Products Quality Control School, Hotel Knickerbocker, Chicago, Illinois.

April 24-25 - Seventh Annual Turkey Processing Seminar, Fort Des Moines Hotel, Des Moines, Iowa.

May 3-4 - Delaware Valley College "A" Day, Doylestown, Pa.

May 4 - New York State Dairy Goat Breeders' Association Annual Meeting, Delmonte Country Manor, Cleveland, N.Y.

May 6-7 - Waste Management and Disposal Conference for the Food Processing Industry, Pennsylvania State University, University Park, Pa.

May 11-18 - Soil Stewardship Week.

May 17 - New England Angus Association Spring Sale and Show, University of Vermont Arena, Spear Street, Burlington, Vermont.

May 18 - Buck Show sponsored by New York State Dairy Goat Breeders' Association, Schaghticoke Fair Grounds, Schaghticoke, N.Y.

May 23-25 - Vermont-New York Flying Farmer Convention, Hotel Bardwell, Rutland, Vermont.

May 27-28 - American Feed Manufacturers Association Annual Meeting, Municipal Audutorium, Kansas City, Mo.

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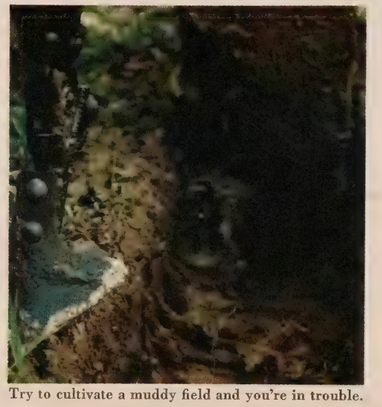

Try to cultivate a muddy field and you're in trouble.

BHL

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DOC METTLER COMMENTS ON

HARDWARE DISEASE

The author is a practicing veterinarian at Copake Falls, New York

An April sunrise can do something to a man's spirit. It makes him forget the snow of February and the mud of March, and think only of what lies ahead. There is no question about it, the farmer who plans ahead is the only one who can survive in today's fast-moving world.

The winter storms probably have done more damage to fences this year than in many a past year. This will mean more pieces of broken wire to end up in the pasture and in crops fed to cattle. Normal spring repair jobs and new building both can mean nails dropped here and there where they, too, can end up in a cow's stomach. Perhaps this is the spring you should put magnets in all your mature cattle.

The use of reticulum magnets to prevent sickness and death in cattle from eating wire and nails started nearly fifteen years ago. Today many farmers have magnets in all of their cattle over two years of age, yet too many of us still trust to luck and just don't get around to using reticulum magnets as a prevention.

Drag It Around

If you don't believe your farm has enough trash metal around to cause trouble in your cows, just put a magnet on a string and drag it around in the dust in your barnyard some dry day. You'll find all sorts of small bits of iron-bearing trash metal on the magnet. The longer a farm has been in operation the more metal there is around. Of course, after a fire or after a new barn has been built, even more metal is on the ground.

Most non-digestive items a cow picks up such as metal, stones, and of course the magnets you put in, end up in the reticulum of the cow. The reticulum is the so-called "honeycomb" or second stomach. It lies as a trap on the forward lower surface of the first stomach (rumen or pouch). The second stomach is the size of a four quart pail, and lies separated from the cow's heart and lungs by only the thin diaphragm or "skirt." When the cow is heavy with calf this second stomach is pressed flat as a pants pocket with the heart on one side and the calf on the other. You can see how any sharp object in the stomach would pierce through at this time if it ever was going to.

Cause of Death

The cause of death from hardware disease is usually peritonitis or inflammation of the lining of the abdominal cavity. Sometimes this peritonitis heals and leaves abdominal organs grown together (adhesions) so that they cannot function properly. Of course, there are often abscesses of the liver or other organs caused by hardware. If the metal pierces the diaphragm it can cause pleurisy (inflammation of the lining of chest cavity), pneumonia, lung abscesses, pericarditis (inflammation of the sac that surrounds the heart), and sometimes heart failure. Even when a cow recovers from an attack of hardware she is apt to never be completely healthy because of the lesions.

A cow can pick up hardware and carry it for months without symptoms, and then, too, she can become sick within hours after swallowing a single piece of wire. Back before magnets were in use we used to remove hardware from cows by surgery.

In one such operation my partners and I removed a wire from a cow's stomach on a Saturday that had been lost in the manger forty feet away on the previous Wednesday. The cow had become sick within twenty-four hours after the wire was lost! The wire had been used to clean out plugged bleeding needles and was dropped.

The owner and the veterinarian who was blood-testing swept out the entire manger and removed hay from ten feet on either side of the place where the wire was dropped. How it traveled forty feet and got into the cow no one ever figured out . . . but it did.

The most important thing about this case was that it pointed out to us that only a matter of hours needs to elapse from the time metal is ingested and when the cow gets sick. It also indicated to us that any needle cleaning had to be done in the milkhouse or back in the office. Nothing should ever be carried in front of cows that could be dropped and lost. This includes nails in farmers' pockets.

Symptoms

The first symptom of hardware disease is an arched back. The typical hardware cow will then go off feed, go way down (to nearly nothing) on milk, her bowels will stop, and she will "just stand there." The typical hardware cow will not kick at her belly or jump around, nor will she lie down much early in the disease. Her pulse is usually very rapid, though in cases where the metal is only pricking the wall of the stomach slightly the pulse may stay normal. The temperature early in the disease is usually slightly elevated. It may be subnormal or up to 106. The "typical" hardware temperature is 103. Late in the disease it goes to normal or below. The rumen stops completely in early hardware, and a hardware cow seldom chews her cud.

Most cows make a temporary recovery from the first hardware attack, and one might say it was only indigestion bothering them. Indigestion is seldom seen in well-cared-for dairy cattle. I have always felt that most cases of "indigestion" in cattle were really attacks of hardware disease.

A veterinarian will often place his stethoscope over the lower portion of a cow's throat and thump her under the chest. This is a good test; usually the cow will grunt if she has metal pricking her. Mine detectors are often used to try to diagnose hardware. I have far more faith in my stethoscope.

Treatment

A cow with early hardware disease may be treated by using a magnet and giving antibiotics for the peritonitis. Remember, a cow may be dying of peritonitis and not run a fever. The hardware cow should be confined to her stall until she is over the symptoms, because the more she moves the more the metal moves. Once the metal hits the heart, treatment is usually useless. Mild laxatives and raising the cow's front feet on a platform are both worthwhile in some cases.

Today we still operate on a cow for hardware on rare occasions, in the belief that perhaps she has copper, aluminum, or some other magnet-resistant object in her. Prior to the days of the magnets, we did remove both copper and aluminum from cows. However, in all the years since we have been using magnets I have yet to say we opened a cow and saved her by surgery when the magnet would not have done the same if we had waited a few more days.

Use Full Size

You can purchase small bargain magnets to use in your cows, but this is a foolish way to be thrifty. For both prevention and treatment use the full-size strong magnets. Since hardware is seldom seen in young cattle, most owners wait till heifers are at least breeding age before inserting magnets.

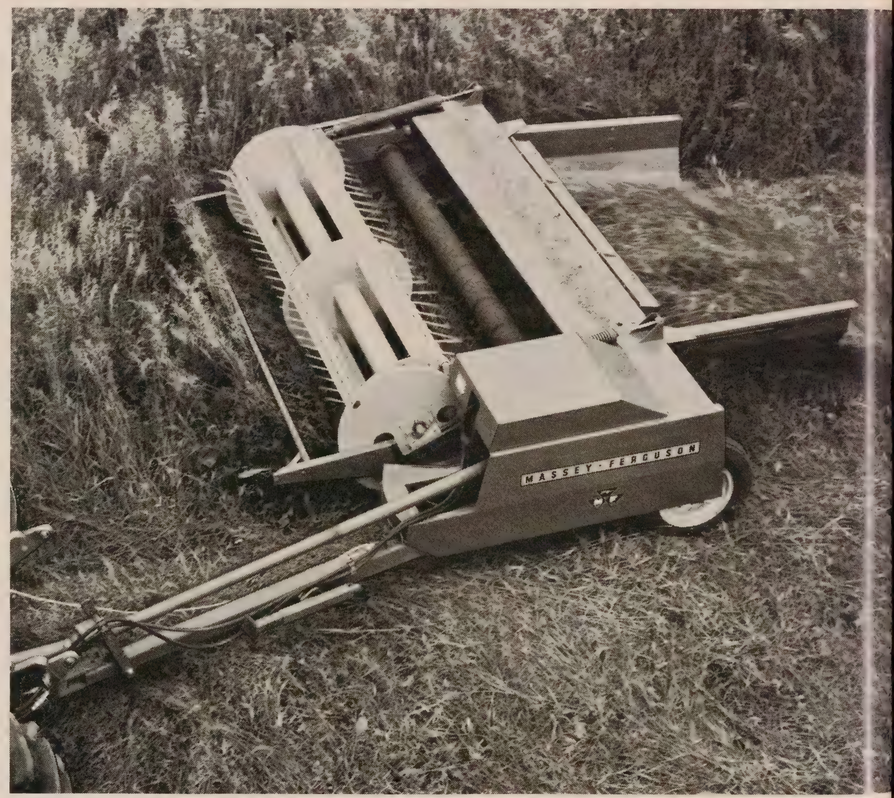
If you are in doubt as to whether a cow has a magnet or not, you can tell easily by using a compass. Pass a compass under a cow just behind her heart. If she has a magnet in her the compass needle will tell you.

There is no reason why any cow should die of hardware today. Magnets are more effective against hardware than most vaccines are against disease. If you have had cases of hardware in the past, discuss with your veterinarian the practicability of putting magnets in all your cattle.

Even if you do have magnets in all your cows, concentrate on keeping your premises trash free. Children playing with nails in front of cows, and careless workmen who drop things and refuse to pick up after themselves are as much a threat to your cows as a disease-bearing animal.

After the hard winter we have had, we hope to have a real nice spring and summer, but weather is something we can't do much about. Hardware disease is one thing we **can** do something about, so don't leave it up to chance.

Everything you need bu he barn.



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FLETCHER THE 4-H'R

JOE E BURESCH

"DON'T BUY THE BIG GIANT ECONOMY SIZE, MOM. WE DIDN'T BRING THE PICK-UP TRUCK."

BHL

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TWO-BIRD CAGES

Ora Haskell, manager of Corbett Brothers' contract table egg production program in the Waterville area of Maine, has charge of a dozen farms with over 200,000 caged layers. In 1968 Leghorns and Sexlinks were divided about equally; now it's 100 percent Sexlinks for brown egg production.

Ora Haskell

Bird density tests have been conducted on a farm-run basis with thousands of birds in two cage sizes. Tests included three and four Leghorns in 12×18-inch cages; three Sexlinks in 12×18-inch cages; and two Sexlinks in 10×16-inch cages. Best results were obtained with two Sexlinks in 10×16-inch cages with less mortality and higher egg production.

Ora is of the opinion the trend will be towards the smaller two-bird cages. These made money last year. He claims there's less picking and tearing with toenails, which helps decrease mortality. Higher egg production means more eggs to sell during the laying year, and more fowl to sell at the end of the year.

Haskell firmly believes bird comfort and space per bird are more important than bird numbers. This includes feed and water space. Other advantages of smaller cages are that birds of uneven weight produce better when spread out, there's less bird competition, less bird strain, and less egg breakage.

He claims more will be heard in the future about separating birds on a weight basis, combined with a feeding program coordinating these weights to get more eggs per bird.

He gets cleaner eggs in the smaller two-bird cages, too. He says, "In a 4 to 6-bird cage there are a lot more legs and toes to stop eggs from rolling out of the cage properly. If an egg does get by without being broken, it stands a good chance of getting soiled en route; it can also lose half the shell in the cleaning process."

Haskell finds problems with too many birds in small cages. Sometimes it is next to impossible to remove a 6 to 6½-lb. bird through some cage door openings in one piece, resulting in possible broken wings, legs, and necks. Pickup help sometimes get gashed arms. Some cage doors are continually opening, a fact not appreciated by deep pit owners.

Incomplete equipment is another problem. He notes the biggest problem has been water systems in which the manufacturer didn't make any provision for water runoff. Some equipment hasn't been thoroughly tested and perfected before being placed on the market.

Watch construction closely for building errors, he warns; make a mistake and you have to live with it for twenty-five years. He highly recommends double-checking plans, measurements, and work many times during construction.

This contract table egg farm manager doesn't feel there will be any great swing to automation in the poultry house until equipment is perfected. He expects the larger family poultry farms will increase to 40,000 to 50,000 birds in cages. — *C. L. Stratton*

One good thing leads to another

Some of your best friends are going to have a new name this year.

Like the dealer you've depended on for Armour fertilizers and pesticides...and the agronomists and crop protection specialists who have "walked the row" with you helping to spot and solve crop problems. Sometimes before they even begin.

And products like mixed fertilizers, straight materials and a full line of pesticides.

They'll all be back this year to continue to help you get the most from your growing lands.

All we're changing is the name.

And in some cases the name's the same. Brands like VERTAGREEN, BIG CROP, POWR-PRILS. The man with the new name, USS AGRI-CHEMICALS, INC., will have all of those for you too.

And you'll probably see the "Big A" around for a while yet. It's been put on a lot of things over the years.

But we'd just like you to know that everytime you see USS AGRI-CHEMICALS, INC., it's a new name for a lot of old friends . . . the people with "a world of ways to help you grow."

Armour fertilizers and pesticides from
USS Agri-Chemicals, Inc.
a Subsidiary of United States Steel Corporation

P.O. Box 1685 Atlanta, Georgia 30301

A BIG CHALLENGE

George Humphrey, Gray, Maine, owner of a large table egg operation, has run several laying tests to find answers in his cage house built in 1965. He used a modified stair step 10×18-inch cage serviced with a feed cart and installed two Sexlinks per cage.

George Humphrey

The 12,000 Sexlinks in the house were replaced with 15,000 Leghorns . . . one-half at two birds per cage. Looking back, he claims he could have put in 3000 more birds without any additional housing investment.

At first birds were housed at varying ages, but due to possible disease problems, he now moves some 40,000 birds on one farm in or out at the same time.

Comparison

In comparing his Leghorns with Sexlinks, Humphrey found his 12,000-bird test lot of Sexlinks averaged 26.5 lbs. of feed per 100 birds per day; the 15,000 Leghorns averaged 21.2 lbs. of feed

(Continued on next page)

per 100 birds per day. Sexlinks averaged 4.37 lbs. of feed per dozen eggs, while Leghorns averaged 3.67 lbs., a saving of .7 lbs. of feed per dozen eggs.

In comparing his cage birds with floor birds, he feels that he saves between 3 to 4 lbs. of feed per day per 100 birds in cages. Although he finds birds may lay a few less eggs per bird in cages, the cost to produce these eggs is less. Another advantage he finds is that it is much easier to supervise a larger number of birds in cages, and the same labor can take care of more birds.

Some Disadvantages

Cages do have their disadvantages. Humphrey's experience is that birds are harder to place in cages, more labor is involved, and the cost is higher. Manure handling can be a problem. He points out that a power failure can be a disaster if the generator doesn't work. A lot of labor is required to clean waterers. More labor is required in moving caged layers out.

In conclusion George Humphrey says, "I feel the independent poultryman who owns and takes care of from 10,000 to 20,000 birds will make more money with birds on litter. But for the large operation that has to hire a lot of labor, and whose servicemen have a large number of birds to supervise, this type operation will be in cages."

Looking ahead into the future he feels there will be more automation in cages (better automation than we have today) and equipment companies will have to make better-quality equipment with fewer breakdowns. Cost of equipment will be based on unit cost and not on a per bird basis as at present.

George Humphrey claims that agriculture today offers a big challenge. For the unbelievers he points to the number of big business firms moving into agriculture. He feels there is still a big opportunity for the individual, but if individuals don't accept the challenge, big business will move in and do it for them. — *C. L. Stratton.*

Editor's Note: Mr. Humphrey was one of sixteen top U.S. farmers named in 1968 to receive the Ford Motor Company's 14th annual Ford Farm Efficiency Award for outstanding agricultural accomplishments. He and his fellow winners will be honored at an awards banquet this year.

TAX BREAK

Top-income farmers may gain income tax savings by taking advantage of the liberalized Keogh Act provisions.

Self-employed persons can now shift part of their farm income to post-retirement years by investing in certain types of retirement plans. Tax liability on the shifted income is also shifted to a later time.

Beginning with 1968, owner-employees may contribute 10 percent of their earned income . . . to a maximum of $2,500 . . . in a tax deferred qualified plan. Several different methods of investing the funds in the retirement plan are available; each has its advantages and disadvantages.

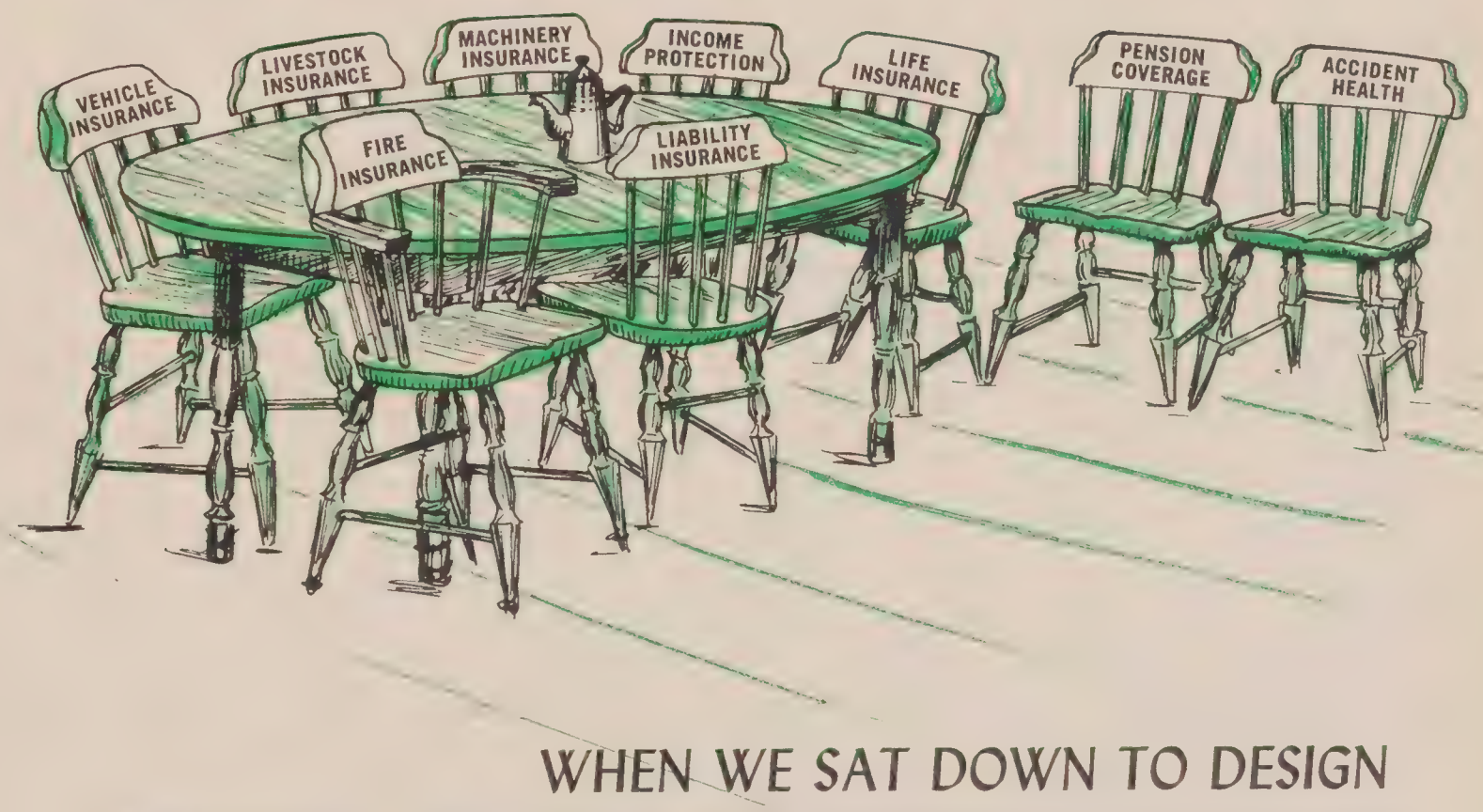
You can purchase nontransferable annuity contracts from insurance companies. Another method is the purchase of special U.S. Retirement Bonds. Still another investment alternative is the use of face amount certificates . . . nontransferable unless held by a trust.

You may also use a trust plan. The trustee may invest in nearly any form of investment, subject only to the directions of the person establishing the trust. A custodial bank account is less formal than a trust. This account puts the funds into the care of a third party. If you decide to set up a self-employed retirement plan, seek competent counsel. Like most tax provisions, the Keogh Act provisions are complex.

Attorneys, bankers, tax specialists, investment people and insurance representatives can be helpful. A visit to the Internal Revenue Service is also advised before setting up a plan.

"Don't think of me as a guy who doesn't deserve a raise . . . think of me as a patriot who wants a bigger surcharge to give to his country!"

THE Farm Family



WHEN WE SAT DOWN TO DESIGN INSURANCE SPECIALLY FOR FARMERS...THE SHAPE OF THE TABLE DIDN'T MATTER TO US.

What did matter was the shape the farmers were in!

Farm Family Life and Farm Family Mutual Insurance Companies were founded with the idea to provide sound insurance uniquely designed FOR farmers . . . BY farmers.

This idea has grown, it has been developed and strengthened, but it hasn't changed.

At many "round table" discussions, Farm Family insurance men designed a full line of Farm Insurance coverages to let farmers concentrate on farming, while their Farm Family agent concentrates on their insurance needs. They understand, because most of Farm Family's agents have been farmers themselves, or have worked directly with farmers.

Farm Family is an insurance company providing full line Farm Insurance coverages: designed *for* farmers, *by* farmers, sold and serviced *by* men who *know* farming.

For a free booklet describing how Farm Family was founded, and how we work for you and other farmers throughout the Northeast, simply write us.

Farm Family LIFE INSURANCE COMPANY MUTUAL INSURANCE COMPANY

GLENMONT, NEW YORK

Electric Grinder

by Wes Thomas

NO MATTER how limited your shop may be, an electric grinder is probably the most useful machine you can have in it. It's also one of the lowest price items of shop equipment, but if you are to get the most service for the least investment, there are several things you should know about grinders.

There are two general types: **Self-contained,** with the wheels on each end of the motor shaft . . . and **belt-driven** using a separate motor.

If you plan to move the grinder frequently from one location to another, the self-contained type is better. However, if a more permanent-type of installation is not objectionable, the belt-driven type has the advantage that it's easier to grind large, awkward-shaped items.

This type installation consists of an arbor, a motor, and a connecting belt. The arbor is essentially a short shaft supported by a bearing near each end. A belt sheave is placed on the shaft between the bearings, and the grinding wheels are fastened on each end . . . beyond the support bearings.

Motor Types

The electric motor can be either a sleeve-bushing or a ball-bearing type. The sleeve bushing type is less expensive but needs oiling more often, and does not run as smoothly. The bushings also need replacement more frequently.

The ball-bearing motor is higher in first cost, but seldom requires lubrication. It runs more smoothly and has a longer useful life.

You should have a ¼ to ⅓-horsepower motor for average usage. The usual shaft speed of 1750 rm is satisfactory for a belt-drive arrangement. However, some self-contained units have a speed of about 3500 rm.

The inexpensive, split-phase-type motor is satisfactory, since the motor is not required to start under load. For the sake of safety and convenience, you'll need an on-off switch to eliminate the need of plugging in and unplugging the cord.

Wheel guards which enclose the wheels ¾ of the way around are important. It is possible for a wheel to fly apart from centrifugal force at high speed. The guard also protects the wheel from being hit by any object that might break it.

Selection

Every grinding wheel has five distinguishing features: abrasive, grain, grade, structure, and bond. All of these factors should be considered in selecting the best wheel for your particular requirements.

Abrasive — In general, you need consider only aluminum oxide or silicon carbide. The aluminum oxide is better for high-strength materials such as steel, malleable iron, or wrought iron. Silicon carbide is preferred for such materials as cast iron, brass, aluminum, and copper. For all-around use, either type of abrasive does a reasonably-satisfactory job in both categories.

Grain — Size is designated by the numbers of grains per inch. Grain size can vary from 8-10 (very coarse) to 500-600 (flour sizes). A No. 60 grain size (medium) is a good compromise for all-around use.

Grade — This tells whether the bond is hard, medium, or soft. Soft wheels, from which the grains are easily loosened, are used for grinding hard materials. For soft materials, hard wheels, which hold together under extreme pressure, are used. For average work, select a medium-hard grade. It wears well, and at the same time retains a sharp edge. The desired goal is a bond which breaks down at the same speed as the abrasive grit becomes dull. This avoids wheel "loading" or glazing.

Structure — The nature of the material to be ground is the determining factor here. For soft materials, a wheel with the abrasive grains widely spaced is preferable. A wheel with closely-spaced abrasive grains is best for hard, brittle material. The widely-spaced grains produce a coarse finish, while the closely-spaced grains produce a smooth finish.

Bond — Vitrified wheels are the usual choice here. Special applications, such as cut-off wheels, require bonds of resin, shellac, or rubber. The strength of the bond determines how much centrifugal force the wheel can withstand. Too high a speed can cause the wheel to "fly to pieces."

Before buying a wheel, check to determine the speed at which it can be operated. Then, knowing the motor speed, use the proper pulley sizes to keep the

(Continued on page 40)

On the All-Electric Farm:

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Electric heat makes farm housework easier. Your home stays cleaner and brighter longer. More comfortable, too—because gentle, even heat is adjustable room-by-room for individual comfort requirements.

AND don't forget! You pay a special **lower** heating rate that applies to **all** uses of electricity on your farm! Ask our farm sales representative for more information about electric heat . . . or any other way to put electricity to work on your farm. Call him at our nearest office.

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LIVESTOCK

Horse Judging—A set of 25 horse judging slides has been developed by former Cornell livestock specialist H. A. Willman. These slides include numerous illustrations of conformation differences, five picture classes of four horses each for judging practice, a key for scoring the placings, a set of written reasons on each class, and the answers to several questions that are asked about the horses.

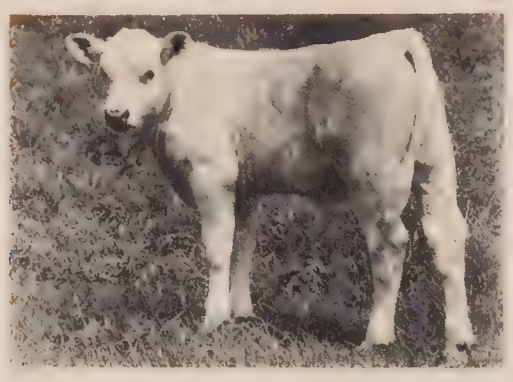
Professor Willman has recently added two supplemental sets of 5 classes each to the original set of 5 slides. Among the types and breeds that are included are horses of stock type and hunter type and the following breeds; Pintos, Quarter Horses, Palominos, Appaloosa and Welsh.

A third set of contest classes will be available in May, 1969. This set of slides will contain polo ponies, Arabians, Appaloosas, stock horses and Welsh ponies.

The price of the original set of 25 slides is $7.50. Each of the supplemental sets of 5 judging class slides may be purchased for $3.00 per set from H. A. Willman, 1526 Slaterville Rd., Ithaca, New York 14850.

Sheep Scabies—With scabies outbreaks reduced to just a few incidents each year, an intensive nationwide search-and-eradicate campaign to wipe out the last traces of this disease is now being carried out by the U.S. Department of Agriculture and the states. Treatment consists of dipping infested and exposed sheep in USDA-approved insecticide baths supervised by either state or federal animal health officials.

Farmers and ranchers should keep a close lookout on their sheep for any signs of itching, scabby skin, or loose wool. If such symptoms show up, get in touch immediately with a state or federal animal health official, veterinarian, or county agent. Sheep will be dipped free of charge.



Charolais—The American-International Charolais Association (923 Lincoln Liberty Life Building, Houston, Texas 77002) reports a growing use of the French breed for crossbreeding . . . with unusual hybrid vigor as a result. The Association cites several feeding experiments at commercial feedlots, all pointing toward the rapid-gain characteristics of the breed . . . in turn providing animals of high cutability grade, and with desirable feed conversion ratios.

The breed is relatively new in the United States, but ranks fourth in numbers . . . 400,000 registered and recorded animals. Breed association membership is more than 7,600 . . . a rise last year of 32 percent.

In the Northeast, the Colonial Charolais Association, 11 W. Pennsylvania Ave., Towson, Maryland 21204, organizes activities, including participation at four shows: New York State Fair, Eastern States Exposition, Pennsylvania Livestock Exposition, and the Eastern National.

MGA—According to Professor Myron D. Lacy of the New York State College of Agriculture at Cornell, the synthetic hormone MGA (melegestrol acetate) when given in minute doses in the feed, improves rate of gain and feed conversion, and suppresses heat in feedlot heifers. The effective dose is 0.25 to 0.5 milligrams per head per day, and at the upper levels, estrus control is more complete.

MGA is practically non-toxic and safe for normal handling in feed manufacturing, and no ill effects are expected if other farm animals eat feed containing it. In one study, heifers on a high concentrate ration showed a 15.9 percent improvement in weight gain, while heifers on a moderately-high roughage ration showed a 12 percent boost.

Studies are underway on how to get an adequate, uniform daily intake into pasture-fed heifers. The Food and Drug Administration requires that heifers be taken off MGA 48 hours before slaughter.

At the top end of the recommended range of feeding MGA, heat is almost totally suppressed, at lower levels, an occasional heifer may show heat. Based on research studies at Iowa State and other stations, heifers fed MGA will come into heat and ovulate following withdrawal of the hormone. The hormone has no effect on steers.

MGA can be obtained from most feed dealers, or your local dealer can obtain it from his company headquarters.

Tilling the soil. . . mowing the hay. . . pulling the heaviest loads. That's the David Brown tractor. We call it the Convincer. . . rugged power. . . streamlined beauty. . . and more tractor than you'll get from any other make for the money. If David Brown can't convince you that it's the best tractor buy today. . . then you're not the convincing type. Take a look at one of the Convincers soon. Many standard features are options on other makes. Like Traction Control—a weight transfer system that distributes the load and pulling power evenly to eliminate wheel slippage. Like the Selectamatic Hydraulic System—a simplified and unique hydraulic system. There's more. . . much more. But the Convincers are more than just mechanical masterpieces. They're low cost tractors too. Low initial cost. Low maintenance cost. Low operating cost. Whatever size you need there's a David Brown Convincer for you—770, 780, 880, 990, 1200 diesel and now two gasoline models to choose from, the 3800 and the 4600. Tell your nearest David Brown Dealer you want to test drive a true Convincer. *For further information, contact the David Brown dealer nearest you or write:*

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DAVID BROWN

17 David Brown Parts Depots To Serve You Throughout The U.S.

Grinder . . . . .

(Continued from page 38)

wheel speed within safe limits.

You can purchase wheels composed of many different special-purpose abrasives. There are wheels for polishing and finishing metals and plastics, as well as cut-off wheels for metal, stone, and glass. Cut-off wheels range from 1/32 to 5/52 inch in thickness. Resin, shellac, or rubber are used as bonding agents. These provide a slight flexibility to help prevent wheel breakage.

The work piece should never be held free-hand when using a cut-off wheel on a grinder. Here's an easy way of providing a satisfactory support. Turn the center link of the tool rest upside down, allowing it to pivot at the bottom. The work can then be clamped to the tool rest and swing into the wheel.

Special-shape wheels are available to meet individual needs. For example, there is a special stone for sharpening mower-knife sections. It can be described as the lower portion of two cones, fastened base-to-base. With this type wheel, you sharpen simultaneously the edge of two adjoining knife sections. This eliminates the need for twisting and turning the knife to properly position the edge of each section for grinding on regular wheel.

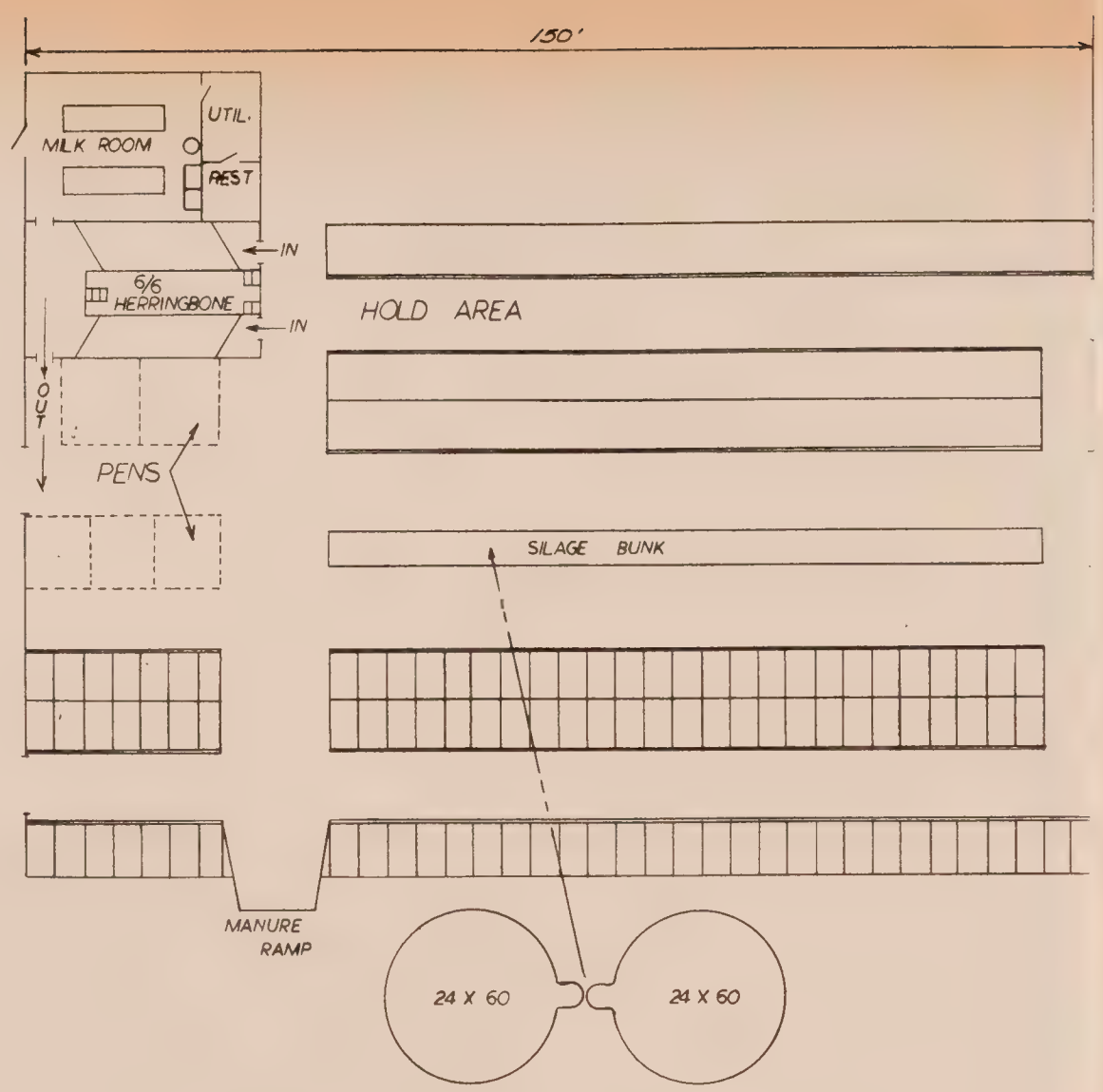
A grinder develops a lot of heat at the grinding surface. Unless you are very careful to keep the surface cool, it produces enough heat to "draw the temper" from the edge of the piece being ground. You can spot this occurrence by the discoloration of the edge . . . the overheated area becomes yellow, blue, or purple depending how hot it was heated. The best way of preventing over-heating is to have a tub or bucket of water on hand, and dip the part into the water frequently.

It is not a good idea to attempt to grind aluminum, brass, or other soft material on your emery wheel. This soft material tends to "load" or fill in the space between the particles of abrasive. As a result, the cutting action of the wheel is greatly reduced.

Always wear a pair of safety glasses or a face shield when using the grinder. Although they may sometimes seem to be a nuisance, they're good insurance against the loss of an eye due to injury from flying sparks or pieces of metal.

One more accessory that you should have is a grinding-wheel dresser. Any wheel eventually becomes out-of-round and develops ridges around it. The dressing wheel is held against the rotating grinding wheel, and cuts it down to a smooth, round shape again.

In the case of special-shape wheels, such as the sickle-knife grinder wheel, it's especially important that you have a dressing wheel to keep the stone dressed to the correct shape. Otherwise, you can't possibly do a proper job of grinding with the wheel.



WHAT THEY'RE BUILDING

The drawing above shows the layout of a new 170-cow free stall barn at the farm of Orrin Pendell at Lisle, New York . . . replacing a conventional barn destroyed by fire.

The double-six herringbone milking parlor is electrically heated, as is the milk room. The bulk tank holds 100 gallons.

Corn silage and haylage are delivered to the bunk feeder from two 24×60's; a barn cleaner chain distributes the silage around the bunk.

Manure is pushed off the ramp into a spreader.

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2,4-D alone just doesn't do the job best anymore. Nowadays, it's the *tough weeds* that cause trouble ...resistant weeds that are still left after spraying 2,4-D. Use Banvel alone, or in tank mix combination with 2,4-D. Apply Banvel to fall-seeded grain right after winter dormancy but before grain begins to joint. Or, to spring-seeded wheat in the 2 to 5 leaf stage. (Not for fields underseeded to legumes.) You can get almost 100% control with Banvel, so don't be satisfied with less. Banvel is translocated within weeds, killing the leaves, stems and roots of stubborn dog fennels (mayweed and chamomile), knawel, corn cockle, smartweeds, lambsquarter, Canada thistle and other major weeds in wheat and other small grains. You'll make more money with Banvel. Just one extra bushel per acre pays for Banvel, the rest is extra profit.

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Food For The Spirit

by Robert Clingan

"HE IS STILL MY BROTHER"

One reason why so many people see no connection between the teachings of Jesus and the problems of today is that they do not understand the life and times in which he spoke, and the prejudices of the people to whom he told his penetrating parables.

A quick retelling or remembering . . . even re-reading . . . of the story of the Good Samaritan becomes just a story of a kind person exposing himself to danger in meeting the needs of a person in distress. We overlook the fact that Jesus, the Jewish teacher, was answering the question, "Who is my neighbor?" posed by a young Jewish lawyer, who acknowledged the second commandment . . . "Thou shalt love thy neighbor as thyself" . . . as the second in greatness.

When Jesus answered in story form he made the victim a Jewish traveler, the indifferent passersby members of his religious and national community. The hero of the story was a Samaritan. The New Testament scriptures remind us several times that the Jews had no dealings with the Samaritans; on one trip the friends of Jesus went out of their way to bypass a Samaritan village. It was a caste system in which Jews excluded Samaritans and Samaritans excluded Jews. The Jews were proud of the integrity of their religious tradition, their family customs, their lineage back to Abraham, the purity of their bloodstream.

In contrast, the Samaritans were people with a mongrel nationality, who spoke a mongrel language and practiced the rites of a mongrel religion. They were lineal descendants of Abraham; they were also descendants of alien soldiers serving in Palestine as an army of occupation. In time they developed a common way of life and identity as Samaritans, the people who came to live in the area of Samaria.

A Divided Society

So a story of "Who is my neighbor?" cuts across the charms of a divided society. Neighbor . . . which can be defined as brotherhood . . . is measured in terms of need and response. The good neighbor, the brother who loved his neighbor as himself, was "he that showed mercy" . . . even though he was a Samaritan . . . and the person to whom he showed mercy was a Jew.

The story reminds us that every man is our brother. The greater his need and the greater our compassion spelled out in deeds of mercy, the more brotherhood becomes real in the world. Regardless of the color of a man's skin, his ancestry, his religious faith or lack of faith, his political affiliation, he still remains my brother. If he becomes ugly towards me, he simply becomes my ugly brother. If he becomes resentful because of things people like my kind of people have done to him or his people . . . recently or over the centuries . . . he simply becomes my resentful brother. He is still my brother.

To believe that God is the father of us all is to believe all men are brothers. These two beliefs are two sides of a single coin. One side says: "God is the father of us all;" the other side says: "All men are brothers." In times of tension and turbulence and change, brotherhood has had difficulty finding visible expression. Yet it is out of the soil of this faith and understanding in the hearts of men that a better world will take root and grow.

AFTER COLLEGE—WHAT?

Few businesses are as meaningful or challenging as modern farm and industrial equipment. The newly-published International Harvester Company booklet, "After my College Degree . . . What?" encourages qualified college graduates to consider the variety of careers available in farm equipment sales, manufacture, engineering, accounting, or finance. It pinpoints the opportunities with a firm whose job is providing reliable mechanical power to help meet the world's food needs. Copies of the booklet may be had by writing to Department AA, Supervisor of College Relations, International Harvester Company, 401 North Michigan Avenue, Chicago, Illinois 60611.

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If you grow vegetables, weeds should be the least of your worries.

Just use Dacthal, the worry-free weed preventer. It gives you dependable preemerge kill of grasses and important broadleaf weeds. And it's cleared for more crops than any other herbicide. Equally important, Dacthal controls weeds without injuring your crops. It's gentle — especially to those vegetables that can be touchy about certain herbicides.

And while you get season-long weed control with Dacthal, you won't get harmful after-season residue. So you can rotate crops, or plant a second crop, with no carryover problem.

Weeds? They can be the least of your worries, with Dacthal weed killer working for you. From Diamond Shamrock Chemical Company, Biochemicals Division, 300 Union Commerce Bldg., Cleveland, Ohio 44115. A unit of Diamond Shamrock Corporation.

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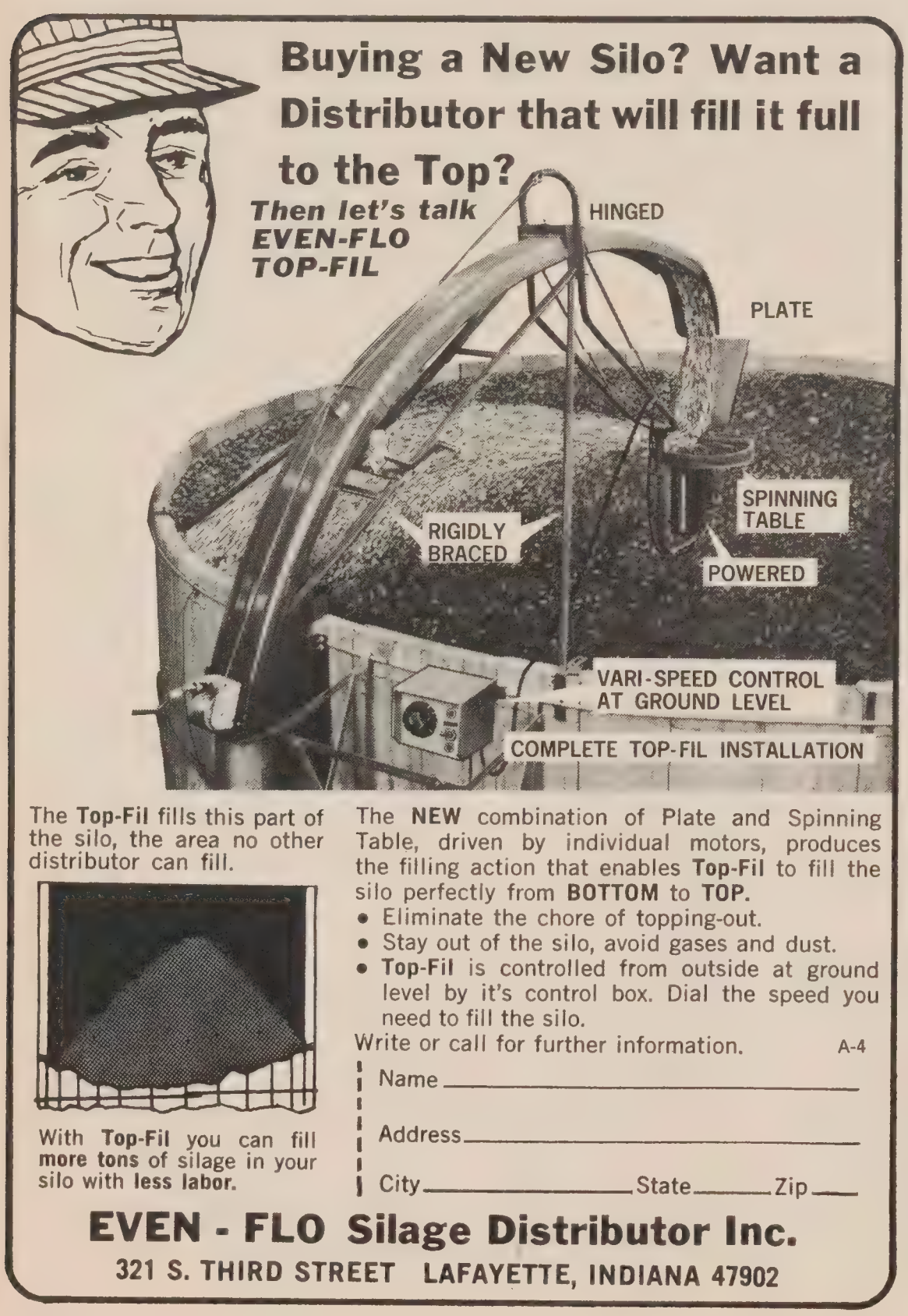

The **Top-Fil** fills this part of the silo, the area no other distributor can fill.

With **Top-Fil** you can fill **more tons** of silage in your silo with **less labor.**

The **NEW** combination of Plate and Spinning Table, driven by individual motors, produces the filling action that enables **Top-Fil** to fill the silo perfectly from **BOTTOM** to **TOP.**
- Eliminate the chore of topping-out.
- Stay out of the silo, avoid gases and dust.
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Merton Dean shows dairyman Clayton Kelkenberg of Wyoming, New York, some heifers ready for sale.

HEIFER SPECIALIST

by Gordon Conklin

SPECIALIZATION in one form or another has characterized agriculture in recent years. For instance, some poultrymen produce eggs while others grow the pullet replacements . . . and a few dairymen are doing the same.

Merton Dean, who lives near Bergen, New York, has over the last decade become a specialist in growing Holstein heifers. It all started with a fire that destroyed his dairy barns . . . a blow that seemed to point toward a shift to cash-cropping. But Merton liked working with dairy cattle too well to stay out of the cow business long!

Buys Calves

So he now purchases female dairy calves (1 week old) at around $35 each from 10 area farmers . . . and eventually sells them as bagging heifers at $400 to $500 each. Occasionally, he also buys animals at a dispersal sale . . . and prices may run higher if a well-known purebred herd is involved. His normal inventory of dairy animals of all ages runs around 300.

The 10 dairymen have an opportunity to buy back their own animals, but Merton owns the heifers and has the privilege of selling them to anyone. He has the production records on all the calves' dams, by the way, and is interested in the offspring of only those posting a milk production average of 12,000 pounds or more. Most of them have mammas with production levels considerably higher!

New Arrivals

When the calves arrive at Dean Farms, employee Bill Kowalczyk supervises their upbringing for the first eight months. Bill, who has worked here for 16 years, came to this country after World War II as a refugee from Poland . . . where he had once sweated (or shivered) in a German slave-labor camp. Some of the people who constantly seek to tear down America should check with him as to whether our nation is still a land of opportunity!

Testimony to Bill's skill with calves is the fact that mortality among them is below three percent. They're tagged with large

(Continued on page 43)

The Song of the Lazy Farmer

If springtime showers make you blue, I've naught but sympathy for you, because I'm sure that worrying will never change a single thing; and it proves you don't understand that Nature's way is really grand. The very folks who cry with pain at ev'ry little springtime rain would prob'ly also be the first to moan if ground and plants should thirst; and if spring flowers didn't bloom, they'd plunge the deepest into gloom; they'd holler loudest 'bout the dust and say it absolutely must cloud up and rain to beat the band or we can't even plow our land.

But farming problems are not my main worry 'bout a spring that's dry; there's other things upset me more when rain don't splash or thunder roar. For one thing, I can sleep more sound whenever I hear raindrops pound upon the roof and window pane 'cause there's no lullaby like rain. And when the day is overcast, there ain't no jobs to be done fast; there's time to spend upon the porch without fear that my wife will scorch me 'cause the field work isn't done; there isn't anything more fun than list'ning to the raindrops say, "You do not have to work today."

plastic eartags upon arrival, and an individual card goes in the file for each. They're also needled on arrival with a combination of antibiotics (penicillin and dihydrostreptomycin), and they receive powdered terramycin in their milk for the first three days. An injectable combination-solution of vitamins A, D and E is also used if calves appear listless.

Milk-Replacer

"Milk" is actually a commercial milk-replacer in warm water . . . Merton comments that, "One important standard by which to judge a milk replacer is how easily it goes into solution, and then stays in solution." Calves are put two in a pen, and trained to drink from a pail . . . Merton believes that nipple-feeding encourages the problem of calves sucking each other.

The calf nursery is equipped with a fan for ventilation . . . but pens are built so no drafts blow on calves. "I don't worry about temperature," Merton comments, "but there must be no drafts." He believes that all too many dairymen give too little consideration to new-born calves . . . and that the age-old problem may be compounded by free stall barns. Many calves come into the world without benefit of a dry, warm calving pen . . . they're chilled, wet, and susceptible to a range of diseases.

At 7 to 8 weeks of age, calves move from small pens to a series of 3 larger pens in the same building . . . each pen holding a different group according to size. An electric dehorner is used on calves as soon as horn buttons can be felt. They receive some commercial calf-starter grain as soon as they'll eat it . . . then move to a home-grown (and home-processed) mix of ground corn, oats, and protein supplement after weaning.

When they become yearlings, they move to another barn . . . and receive no grain from then to one month before heifers are sold. They **do** continue to have free access to good hay, and at this age begin getting lots of corn silage.

Corn

The 300 acres of corn grown at Dean Farms in 1969 will provide 3500 tons of corn silage to be stored in two horizontal silos . . . as well as ear corn for processing by Merton's portable grinder-mixer. Some of it will feed dairy steers being fattened for meat purposes . . . an enterprise planned for considerable enlargement beyond the 60 head already started. Merton plans to buy male calves from the same farmers he's presently working with.

An Angus bull runs with growing heifers; they're bred to freshen at 24 to 25 months of age . . . and around 1200 pounds in weight. Merton says, "You've got to have **size** on heifers to be successful in this business . . . there's no substitute for it."

One measure of his success is that he hasn't sold a dairy replacement to a dealer, or at an auction, in two years; dairymen beat a path to his door to buy them. His formula is a time-tested one . . . a quality product, and confidence in his integrity.

In a world of uncertainty and massive change, that formula stands the test of time as a mighty rock within a weary land!

AQUATIC WEED CONTROL

An aquatic weed control machine . . . developed and patented by Mr. David Talbott of Annapolis, Maryland . . . uses high pressure water jets to agitate the bottom sediments, and free the roots, seeds, and tubers of aquatic plants. In the presence of currents, it also performs minor dredging tasks.

The prototype machine, dubbed "The Weed Witch," was first put into use in the Annapolis area in 1964 to clear private beaches of weeds which inhibited enjoyment of swimming and boating. Operated by Mr. Talbott's fourteen-year-old son, the Weed Witch was an instant success.

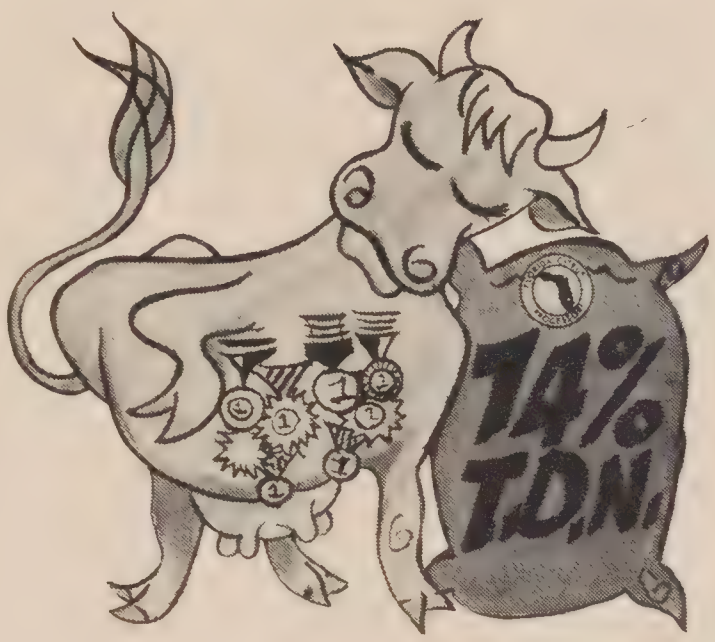
The Weed Witch is a system of engine-driven water pumps mounted on an eighteen-foot-long barge. The water is pumped through a manifold of poly-vinyl-chloride pipes which is lowered to the bottom by a winch.

The machine has been extensively used by private waterfront owners as well as marinas, yacht clubs, community organizations, and waterfront apartment complexes in all of the waters in the vicinity of Annapolis.

The machine has evoked considerable government and commercial interest. Several modified designs are currently under consideration by various users, each built to meet specific situations. For further information, contact Dr. Joseph K. Taussig, Jr., Aquatic Controls, Inc., 208 Wardour Drive, Annapolis, Maryland 21401.

HIGH ENERGY VALUE

FLORIDA CITRUS PULP



Add Florida's sunshine packed nutrition to your feeding program. Florida Citrus Pulp has the extra energy value your herd needs. Cows just naturally thrive on this clean, easy to handle feed. . . and they enjoy its fresh, pleasant taste. Before planning your next feeding program, consult your dealer or distributor about including high energy Florida Citrus Pulp in your dairy or beef feed mix . . . available in bag or bulk. . . by rail or truck.

For more information on Feeding or Total Digestible Nutrients, send for a Free full color Citrus Pulp Brochure, or send for "Men Who Feed the World," a 16 mm color film for group showing.

Content	% Protein	% Fat	% Minerals	% Fiber	% N.F.E.*	% T.D.N.**
Citrus Pulp	6.0	3.0	4.2	16.0	55.0	74.0
Beet Pulp	9.2	0.5	3.4	19.8	57.2	67.8
Snapped Corn	8.0	3.0	2.4	10.6	64.8	67.8

(* Nitrogen-free extract ** Total Digestible Nutrients)

THE BEST OF FEED FOR THE BEST OF BREED

FLORIDA CITRUS PROCESSORS

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Dr. William Kelley adjusts one of the flexible hoses emptying into the trunk line.

UNUSUAL HORSE BUSINESS

by Bob Cudworth*

ONE of the more unusual . . . but not new . . . agricultural enterprises in the Northeast is the collection of urine from pregnant mares for the production of hormones.

Much of the raw material is collected from farms throughout New York State and Canada. For example . . . Dr. William S. Kelley, veterinarian of Liverpool, New York, has a string of 50 mares which he uses for this purpose.

A predecessor of Ayerst Laboratories of Rouses Point, New York, found in 1941 that estrogens extracted from pregnant mare's urine had a high degree of activity in humans. Patents were obtained in 26 countries, and today Ayerst sells this particular hormone product in 50 different countries of the world. Estrogens are female hormones produced by the ovaries. They are necessary to every woman's health, and normally she will produce sufficient quantities for her needs.

But when a woman reaches the menopause, her natural secretion of these hormones ceases and the change of life is frequently accompanied by distressing emotional or physical symptoms. To overcome or prevent these problems, many physicians replace these missing chemical substances by estrogens obtained from other sources.

Have Surplus

A pregnant mare produces more estrogenic hormones than she requires for her own body . . . and since these hormones are water soluble, the surplus is excreted in the urine. The estrogen is extracted by a series of physical and chemical methods. From each 1,000 pounds of urine the lab is able to obtain only one ounce of hormone content!

Dr. Kelley, a veterinarian in the Liverpool area for 10 years, has had his horses stabled at three different locations during the past two years. However, he has purchased a farm near Baldwinsville, which used to house a beef operation, and this facility allows all the horses to be at one location.

Cool Months

The Ayerst plant is open October 1 through April 30; collections are made only during those cool months.

Dr. Kelley points out that the procedure is to send a urine sample from each mare after she has been pregnant for four months. The hormone content of a pregnant mare's urine increases steadily throughout most of its pregnancy; until the four-months period it is not feasible for the lab to extract the hormone.

As soon as the sample has been okayed, the horse is put in a straight stall and fitted with a special harness and collection apparatus fitting under the horse's tail. The urine runs into a tube, through a 1.5-inch plastic pipeline, and empties into a 30-gallon plastic tank. The tanks, which weigh 280 pounds when full, are picked up once or twice a week by trucks from the lab.

Breeding Time

The breeding time is especially critical, notes Dr. Kelley, because a mare can only be on the line from her 4th through 10th month of pregnancy, and the lab only picks up from October to mid-April. For that reason, the Kelleys try to breed all their horses in June or July.

Dr. Kelley has two Arabian stallions; his mares are Arabian, Quarter Horses, American Standardbred, and Pintos. He is interested in Arabian breeding because of the expanding market for Arabian colts.

Experience has shown that blocky, heavy saddle-horse mares work best for the urine collection because they tend to produce more than mares that are flighty and too skittish.

Dr. Kelley pointed out that he made good use of artificial in-

(Continued on next page)

*387 Northfield Way, Camillus, N.Y.

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There is a new, proven way to faster and better hay. Now, you can get faster and better hay with the Fahr Centipede Haymaker developed by the Fahr Machine Company, a leading overseas manufacturer of farm equipment since 1870. In the past seven years, more than 400,000 Centipede Haymakers have been put to work on farms in every part of the world. They are available through your local dealer in 8½′, 16′ and 22′ sizes — ready to make hay for you at the rate of 8, 16 and 22 acres per hour.

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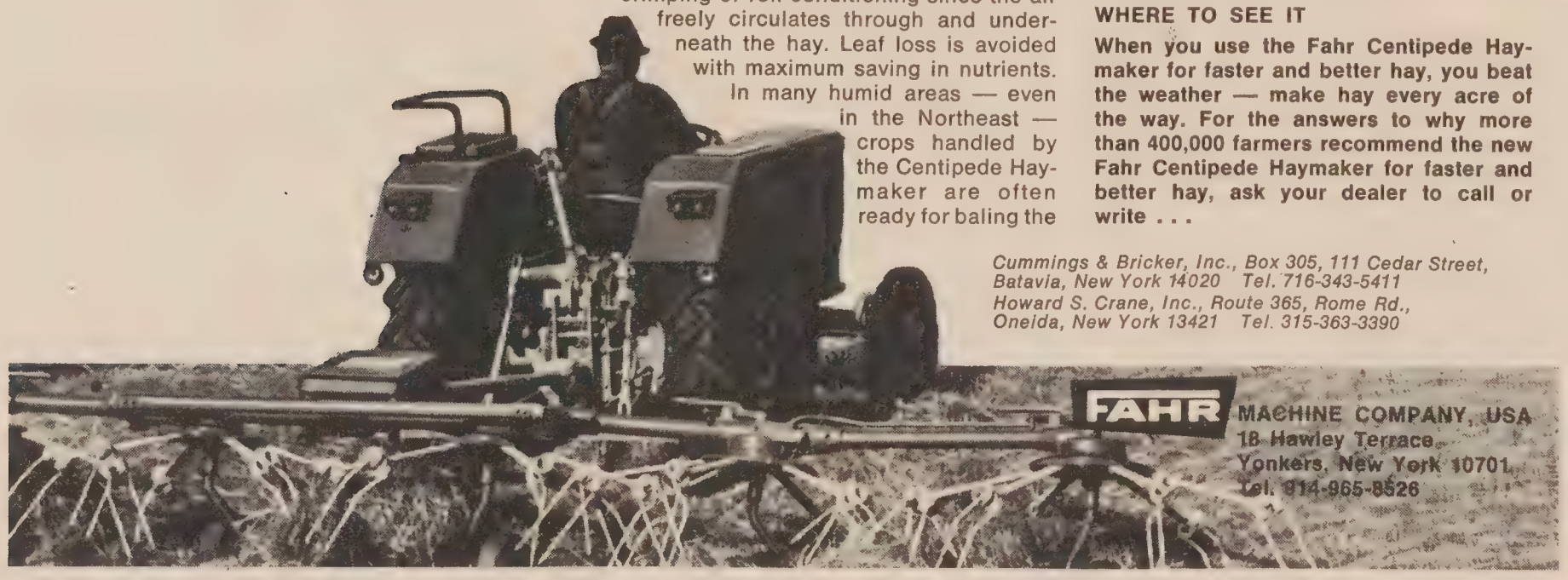

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Clark Enterprises
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Columbus, Ohio 43221

Dominion Signal Co., Inc.
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International Industries, Inc.
P.O. Box 5415
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Lyle Sign, Inc.
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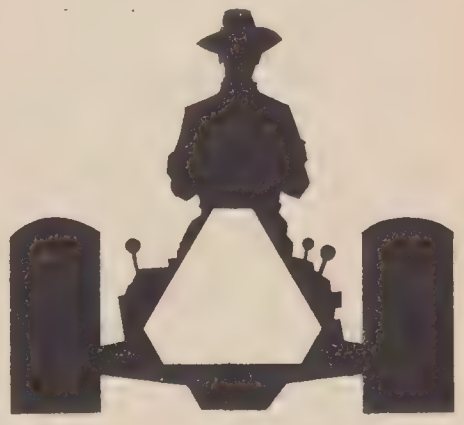

Horse . . . . .

(Continued from page 44)

semination when he had animals at more than one location and several mares were coming into heat simultaneously. By putting an extender with semen from one of his stallions, he has flown to the other location (50-70 miles away) and bred the mares artificially within 12 hours. With this method he reported a very good (95 percent) conception rate. He has tried frozen semen, however, and it has not worked well thus far.

Careful Handling

He notes that he and his brother Ronald, who takes care of the horses, are very careful about how they are handled and fed.

It is particularly important that nothing upsets the mare in the 3rd to 4th month of her gestation period. The mare is brought in from the pasture for a gradual transition to the straight stall. Feed is changed gradually and the horse gets regular exercise. Any new horses brought in are isolated for two to three weeks before being allowed with the rest.

Every animal is given a close examination twice a year, along with distemper vaccine, shipping fever vaccination, and tetanus anti-toxin to prevent infections along the way. The uterus of each mare is infused with antibiotics.

As for feeding, care is taken to be sure the mares are fed good-quality hay. The grain ration is corn and oats with some molasses . . . but no minerals. And, of course, plenty of water is provided.

The lab shows by testing that some mares have higher quality urine for hormone production than do others. It is hard to tell why, says Dr. Kelley, and it may vary for one mare from year to year.

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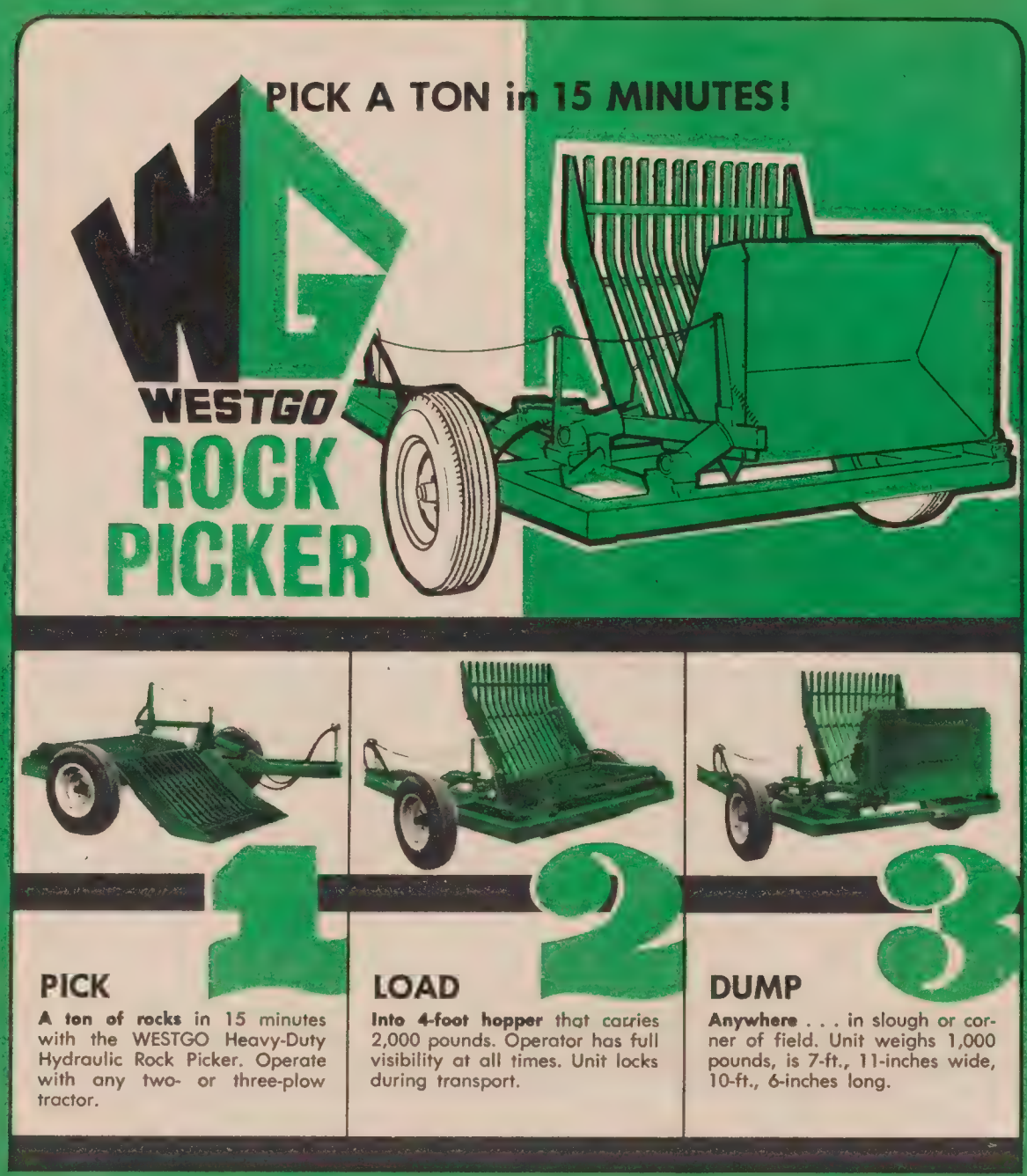

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SOME CONCRETE FACTS

CONCRETE offers a number of possibilities to the farmer. First of all, it is versatile . . . can be molded and shaped into any form imaginable. Concrete is long-lasting, and is practically maintenance-free.

For sizeable projects like paved feedlots, driveways, large patios, floors, and so on, most farm operators find that using ready-mixed concrete makes the job easier and even more economical in the long run.

But if you mix your own concrete (and even if you use ready-mix) there are a few fundamentals that you should know if you want your concrete project to turn out well.

Materials

The materials used for concrete must meet certain requirements. First of all, if you are going to mix the concrete yourself, be sure that the cement is not lumpy. Cement with lumps too hard to pulverize in the hand should not be used. Portland cement becomes lumpy when it is stored in a damp location. Therefore, always try to store cement in a clean, dry place.

Aggregates used in the concrete mix . . . sand and gravel . . . should be clean, hard, and durable. Sand should contain particles ranging in size from very fine up to ¼-inch in diameter. Gravel or crushed stone should range from ¼-inch to the maximum size needed for the job.

Mixing water should be clean enough to drink.

The Mix

The quality of concrete is largely controlled by the amount of mixing water used in proportion to the amount of cement . . . regardless of whether the concrete is mixed on the job or ready-mixed concrete is used. A cubic foot of concrete generally consists of 24 pounds of cement, 52 pounds of sand, 78 pounds of gravel . . and 1¼ gallons of water.

It's always a good idea first to prepare a trial mix; if this mix does not give satisfactory workability, vary the amount of aggregate used. **Do not vary the amount of cement and water.**

When hand-mixing concrete for small jobs, mix the dry materials (the cement and the aggregates) in a container or on a suitable hard surface. Then make a depression in the pile and add some of the mixing water. Continue mixing the concrete and add the remainder of the measured amount of water.

If the mix is too wet, add more sand and gravel.

(Continued on page 47)

If you plan to use ready-mixed concrete, remember the numbers 6-6-6. These stand for 6 bags of cement per cubic yard, 6 gallons of water per cubic yard and 6 percent entrained air.

The entrained air is important because it prevents scaling caused by freezing and thawing cycles. Air-entrained concrete should be used for all work that will be exposed to freezing and thawing.

Before the concrete is placed, be sure that the forms are tightly braced, that the forms are coated with a light form-oil and that the right equipment and sufficient help are on hand.

Do not place concrete on frozen earth, on mud, or on earth covered with water. If the ground is extremely dry, it should be dampened to prevent it from absorbing the concrete mixing water.

After the concrete has been placed, strike it off with a straightedge, usually a 2×4. The stakes holding the forms should be cut off even with the top of the forms to permit continuous movement of the strike-off board.

One to three strike-off passes should be sufficient. A trowel or spade should then be worked along the face of the forms to give a smooth side-surface to the concrete.

There are a number of finishes that can be given to a concrete surface . . . depending on the type of finishing tool used. A float will give the surface a gritty texture. If a rougher texture is desired, the surface is first floated and then broomed by dragging a stiff-bristled broom across the surface. The stiffness of the bristles, and the pressure applied, determine the degree of roughness in the surface.

Float and broomed finishes are recommended for sidewalks, driveways, and ramps. Steel troweling gives a smooth finish, but it does not always provide sufficient footing. A steel trowel finish is usually used on floors, patios and basement floors.

Floated

After the concrete has been struck off, it is floated with a light metal float. A float with a long handle is excellent for finishing flat slabs. A final floating with a hand float is usually given to the concrete surface. Brooming and steel troweling are both usually done after the floating operation.

The proper time to begin steel troweling is critical. Premature troweling causes a mixture of water, cement, and fine sand to work to the surface, resulting in poor wearability and surface "crazing." Troweling should be done **after** the water sheen has disappeared from the surface of the concrete. Do not sprinkle water or dry cement on the surface of fresh concrete.

To produce a smooth, rounded edge that will resist breaking and chipping, use an edging tool between the concrete and the form. The edging tool should be used while the concrete is still plastic.

Curing

After finishing the concrete, it **must** be cured. Concrete will develop up to 50 percent more strength if it is properly cured. And curing is one of the most inexpensive ways to ensure a long-lasting, satisfactory job.

Concrete may be cured economically by using either plastic sheeting or waterproof paper placed right after finishing. Straw, burlap or similar material that can be kept continuously wet for at least six days also may be used for curing. Forms should be left in place for several days to aid in curing.

For information on all aspects of concrete use on the farm and in the home, write: Dept. AA, Portland Cement Association, Old Orchard Road, Skokie, Illinois 60076.

COUNTY AGENT FILM

County agents, their work and their importance to farmers and farming, are subject of an award-winning film produced by New Holland. The film, "The Partner," has been awarded a blue ribbon for excellence in motion pictures by the American Society of Agricultural Engineers.

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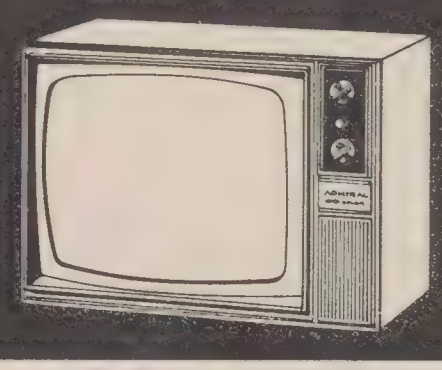

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	All Herdmates Average	16,087M	3.62%	583BF
	Difference	+3,830M	-.08%	+122BF
	Repeatability 41%			
	EDS or Pred. Diff.	+1,689M		+ 54BF
1874	USDA Daughter-Herdmate Comparison, 1/69			
	41 Dtrs., 51 Recs., 28 Herds	17,376M	3.52%	611BF
	All Herdmates Average	16,469M	3.59%	592BF
	Difference	+ 907M	-.07%	+ 19BF
	Repeatability 66%			
	EDS or Pred. Diff.	+ 783M		+ 19BF
1866	USDA Daughter-Herdmate Comparison, 1/69			
	25 Dtrs., 34 Recs., 17 Herds	18,037M	3.64%	657BF
	All Herdmates Average	15,755M	3.68%	580BF
	Difference	+2,282M	-.04%	+ 77BF
	Repeatability 52%			
	EDS or Pred. Diff.	+1,310M		+ 45BF
1876	USDA Daughter-Herdmate Comparison, 1/69			
	24 Dtrs., 24 Recs., 22 Herds	15,739M	3.74%	588BF
	All Herdmates Average	14,467M	3.58%	518BF
	Difference	+1,272M	+.16%	+ 70BF
	Repeatability 54%			
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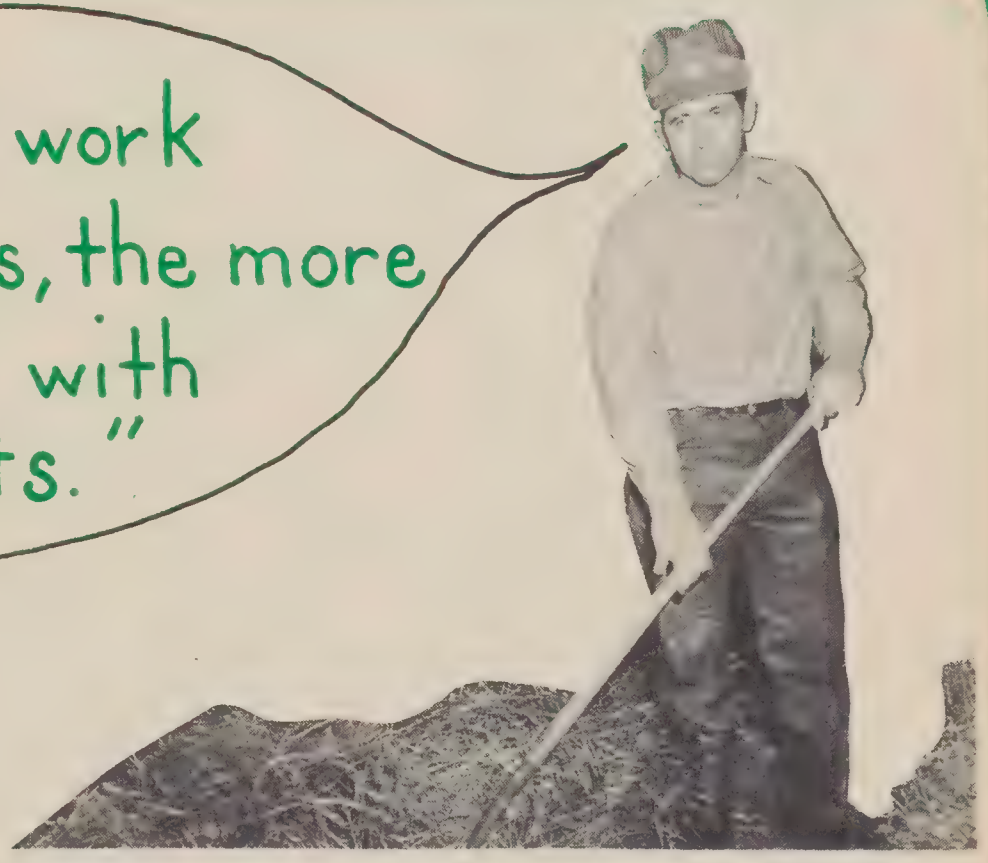

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SPARROW TRAPS

SPARROWS EAT PROFITS! Get new, improved trap. Guaranteed satisfaction. Free particulars. Roy Vail, Antwerp 10, Ohio 45813.

continued on page 57

Cooking Fancy with Eggs

by Alberta Shackelton

EVERYONE TAKES for granted the "good egg" appearing in some form in breakfast, luncheon or dinner dishes, but have you ever stopped to think of the easily-made fancies possible with the help of eggs? Right now eggs are more plentiful and less expensive than at other months of the year. Here you will find some dessert recipes which use eggs, and all of them will add sparkle to your spring menus.

CHOCOLATE SOUFFLE

3 squares (3 ozs.) unsweetened chocolate
1¼ cups milk
2½ tablespoons cornstarch
¾ cup sugar
¼ cup cold milk
1½ teaspoons vanilla
½ teaspoon salt
6 eggs, separated

Preheat oven to 350° (moderate). Butter bottom and about ⅔ way up sides of a 1½-quart souffle dish (or straight-sided casserole) and dust with granulated sugar. Set souffle dish in a shallow baking pan and place in oven while preparing souffle. Pour boiling water around casserole to depth of at least one inch.

Combine chocolate and 1¼ cups milk and stir over medium heat until chocolate is melted. You may use a double boiler if you prefer. Blend together the cornstarch, sugar, and ¼ cup cold milk and stir into the chocolate mixture. Cook with constant stirring over medium heat until sauce is smooth and thickened. Remove from heat and stir in vanilla.

Add salt to egg whites and beat until stiff and glossy, but not dry. Beat the egg yolks until thick and lemon colored. Fold egg yolks into chocolate sauce. Fold this mixture gently but thoroughly into the beaten egg whites, adding about ¼ of the mixture at a time. A rubber spatula is good for this folding. Pour mixture into prepared souffle dish or casserole. Bake 1 to 1¼ hours, until just set. Serve at once topped with whipped cream or a scoop of vanilla ice cream alongside. Serves 6.

FROSTED DAFFODIL CAKE

1¼ cups sifted cake flour
½ cup fine granulated sugar
1¼ cups egg whites, at room temperature
¼ teaspoon salt
1½ teaspoons cream tartar
½ teaspoon vanilla
1 cup sugar
4 egg yolks
1 teaspoon grated orange rind
2 tablespoons orange juice
2 tablespoons sugar

Frosting

⅓ cup soft butter
1 egg yolk
3 to 3½ cups confectioners' sugar
2 to 3 tablespoons orange juice
1 to 1½ teaspoons grated orange rind

Sift flour and ½ cup sugar together. Combine egg whites, salt, cream tartar and vanilla and beat until soft peaks form. Add 1 cup sugar gradually, about ¼ cup at a time, beating well after each addition. Sift flour mixture over beaten egg whites in four additions, folding in each addition gently.

Combine egg yolks, rind, orange juice and 2 tablespoons sugar in another bowl and beat until light and very thick. Then fold in about ⅓ of the beaten egg white mixture. Using an **ungreased,** deep 10-inch tube pan, alternate spoonfuls of the white and yellow batters to give a marbled effect, finishing the top with the remaining white batter.

Bake in a moderate oven (350°) about 35 to 40 minutes, or until cake springs back when pressed lightly or when a cake tester inserted in center comes out clean. Cool cake thoroughly upside down, loosen cake gently from sides and bottom of pan with sharp knife, and remove cake from pan.

Frost lightly with Orange Frosting: Blend together the soft butter, egg yolk, and half or more of confectioners' sugar; stir in orange rind and orange juice with enough of the remaining sugar to make frosting easy to spread.

OLD-FASHIONED TAPIOCA PUDDING

⅓ cup pearl tapioca
1 quart milk
4 egg yolks
1 cup sugar
4 tablespoons cold milk
4 egg whites
⅛ teaspoon cream tartar
⅛ teaspoon salt
½ cup sugar
2 teaspoons vanilla

Soak pearl tapioca in enough cold water to well cover for 2 to 3 hours; drain. Scald 1 quart milk in top of double boiler over boiling water. Add the soaked and drained tapioca and cook covered until tapioca is clear, 30 to 45 minutes.

Mix the egg yolks with 1 cup sugar and 4 tablespoons cold milk. Pour a little of the cooked hot tapioca mixture over the egg yolks and then add them to the remaining tapioca mixture in double boiler. Cook for about 5 minutes or until mixture is thickened.

Pour into a 1½ to 2-quart casserole. Place 8 or more dollops of meringue on top (meringue may be lightly sprinkled with shredded coconut if desired) and place in a moderate oven (350°) for about 5 minutes, or until meringue is just lightly browned. Cool.

To make Meringue: Beat egg whites until foamy, add the salt and cream tartar, and continue to beat until stiff but soft peaks are formed and sugar is all dissolved.

Note: I frequently cool the tapioca mixture and pour it carefully into a pretty glass bowl, topping the pudding with separately cooked meringues. To cook meringues separately, drop 8 to 10 dollops of the meringue on top of **hot** water in a shallow baking pan or large skillet. Bake in moderate oven (350°) for 5 minutes, just until they are set and lightly browned.

Carefully transfer meringues with a slotted pancake turner or broad fork (to allow them to drain) to top of the tapioca in the bowl. For a spring touch, cover top of pudding with sliced fresh strawberries before adding meringues.

A souffle is elegant looking, but really not hard to make. The secret is to serve it as soon as it's taken from the oven.
Photo: Poultry & Egg National Board

What could look prettier for an afternoon tea or dessert party than a Lime Chiffon Pie garnished with sliced fresh strawberries!
Photo: Dudley-Anderson-Yutzy

CREAMY LIME CHIFFON PIE

1 tablespoon unflavored gelatin (1 envelope)
½ cup sugar
Dash salt
4 eggs, separated
½ cup lime juice
¼ cup water
Grated rind of 1 lime
½ cup sugar
½ cup heavy cream, whipped
1 9-in. crumb or baked rich pastry shell
Whipped cream

Combine gelatin, sugar, and salt thoroughly and stir in the egg yolks which have been beaten with the lime juice and water. Cook with constant stirring over medium heat until the mixture just comes to a boil. Remove from heat and add lime peel. If you wish, you may add a few drops of green coloring. Chill mixture until partially set.

Beat egg whites until soft and glossy (not dry) peaks form. Gradually beat in the sugar and continue to beat until stiff, glossy peaks form. Fold the gelatin mixture into beaten egg whites and then fold in the whipped cream. Place in pie shell and chill until firm. Spoon lightly-sweetened whipped cream in a circle around pie and decorate with slices of fresh strawberries.

FRENCH LEMON SPONGE PIE

3 eggs, separated
1½ cups sugar
1 lemon, juice and rind
2 tablespoons flour
1 tablespoon melted butter
¾ cup milk
1 9-inch unbaked pie shell

Add sugar, lemon juice, rind and flour to egg yolks and blend well. Add the melted butter and milk slowly. Beat egg whites until stiff and glossy, but not dry; fold them carefully into the egg yolk mixture.

Pour into unbaked pastry lined pan. Bake in quick hot oven (425°) for 10 minutes. Reduce heat to 325° and bake 20 to 25 minutes longer, or until puffed and firm in center. Cool. Serves 6.

What's Your Hobby?

Hobby letters from our readers

Their Hobby Is Digging

Our hobby is collecting and exchanging old barbed wire and old bottles, especially fruit jars with different names, colors, and closures. We have a 240-acre farm and a small dairy of 24 cows, but when the days are shorter and the weather permits, we take to an old woods, gully or dump and dig! We have dug many an old dump for bottles, and it's very interesting how so many lead back to local history.

Bottle collecting is a big hobby in the West, so let's "dig" the East! We have many duplicates and would like to hear from others who collect the same things.—**Charles and Flora Swank, 1 Sherwood Rd., Aurora, N.Y. 13026.**

Hobby Is Genealogy

My most absorbing hobby is genealogy. I have really had to dig for my **Elliston** line, which I have gotten back to John B. 1777. He was of Moreau, N.Y. in 1810 to 1830 and Wilton, N.Y. in 1850. His daughter Mary "m." James **Kelly** who was of Moreau in 1810 and 1830. Can anyone help me on these lines?—**Mrs. Dwight B. Fairman, 25 Coolidge**

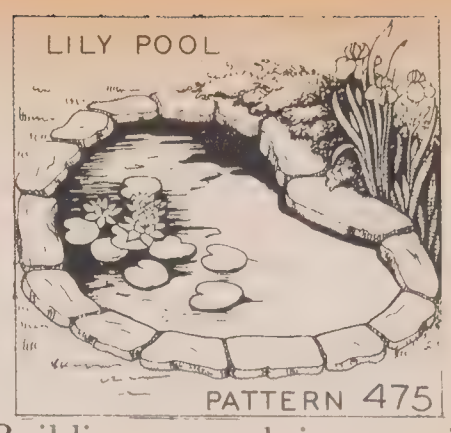
Collects Many Things

Many years ago I started a collection of handkerchiefs with flowers on them for my mother, and I am still collecting them. It's amazing how many different ones I have found.

I also collect small bottles of all shapes and colors, mostly crystal; also pictures, poems and articles from magazines which I enclose in letters to the boys in Viet Nam.—**Miss Elisabeth Nagy Huck, 10 Baker Ave., Westport, Conn. 06880.**

Collects Apple Recipes

I am semi-retired, and my hobby is collecting apple recipes. I have about 50 different recipes at present and intend to print my collection in pamphlet form within six months. I would like to have about 200 recipes before printing and will send a copy of my collection to any **American Agriculturist** reader who will send me at least two recipes that use apples in unusual ways.—**Jules Nye, Concord Road, Concordville, Pa. 19331.**



Building a pool is a project that adds charm to the garden and leads to interest in aquatic and species of fish, both interesting hobbies. Pattern 475, which shows in detail how to make garden pools and how to plant water lilies, is 50 cents.

Send order to **American Agriculturist, Pattern Dept., P. O. Box 50, New Windsor, N.Y. 12550.**

CARE OF EASTER-TIME PETS

What is more appealing or even more adorable than the sight of furry baby chicks, ducks, and bunnies in a pet store window? The answer to that question is simple — the sight of these cuddly bundles of delight **in your very own home!**

In talking with Mr. John Degenfelder, owner of the Crown Pet Shops (the West's largest), we received some very valuable hints about the care of these pets which we would like to share with you.

When your new pet arrives, remember that it is still a tiny baby and will need tender love and care just like a real baby. But please, don't overwhelm it with affection. Most important, whether you get a chicken, duck, or bunny remember to keep it WARM and DRY.

Just because a rabbit has large ears, don't be under the impression that they should be used as handles. Pick up the rabbit about the body just as though it were a dog. The proper method of handling ducks is to hold the duck by the neck in the one hand and have the other hand under its breast. Ducks can be carried securely tucked under one's arm at all ages and sizes. Baby chicks should be handled as rarely as possible. To pick up a chicken, place palms of both hands on each side of its body with fingers well underneath and lift it gently.

If at all possible, get all the things you will need to care for your pet before his arrival. Things like the proper box or hutch, food and water container. For example, if you are getting a chicken it needs the kind of water dish which does NOT permit wading. The best kind is a fountain water bottle. Make sure you place the box near a stove, radiator or any other safe source of heat.

Every reputable pet shop will have booklets on the care of these pets and it is strongly recommended that you get one so you'll know exactly what to do. Happy Easter.

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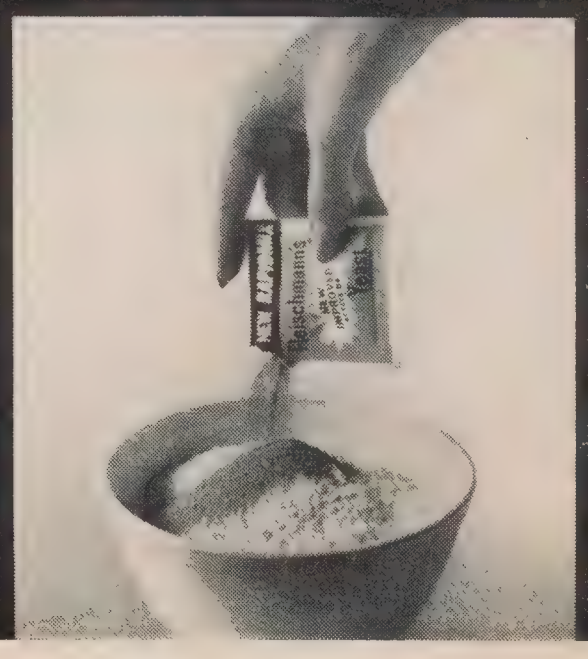
For a treasury of delicious breakfast recipes—including the frosted pineapple squares illustrated above—just send 25¢ in cash to cover mailing and handling to: Fleischmann's Treasury of Yeast Baking, Box 6F, Mount Vernon, New York 10559.



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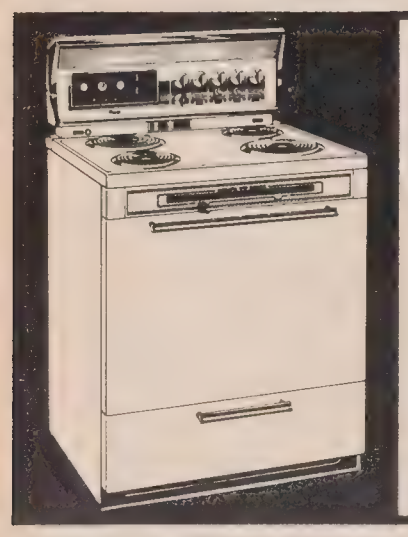

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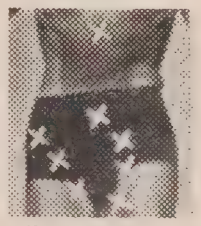

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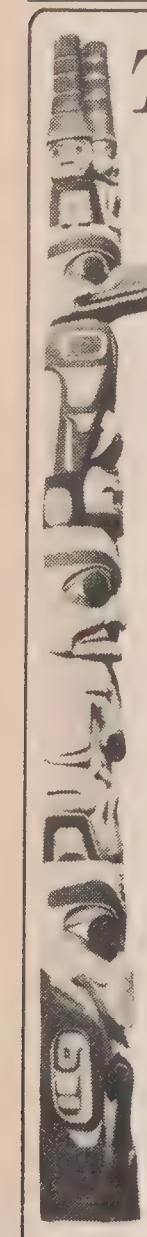

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AROUND the HOUSE

Easy Pickled Eggs

Place whole, peeled, hard-cooked eggs in a glass jar. Cover with a mixture of equal parts beet juice and vinegar. Add a little chopped onion and a few whole cloves. Cover container and keep in refrigerator 3 or 4 days before serving.

Westinghouse's new can/jar opener breaks the seal on all types of jars as well as opening cans. Sells for about $16.95.

Now, you don't even have to open the freezer to get ice cubes! **General Electric** has a new refrigerator with handy dispenser on the door to automatically deliver ice cubes or chilled water at a touch.

Helpful Hints

When washing a chenille bedspread, if you do not own a dryer, try hanging it over the line with right sides together. They will rub against each other while drying and fluff the spread.

Cut plastic drycleaner and other garment bags, also plastic bread wrappers, into 12 or 15-inch squares to put on the bottom of garbage bags. This makes a stronger receptacle than the waxed bags you buy and costs nothing. Cut the plastic as it accumulates and keep in a roll in a kitchen drawer.

Also, when garbage bag is full, the tape that comes on bananas is handy for taping bag shut.

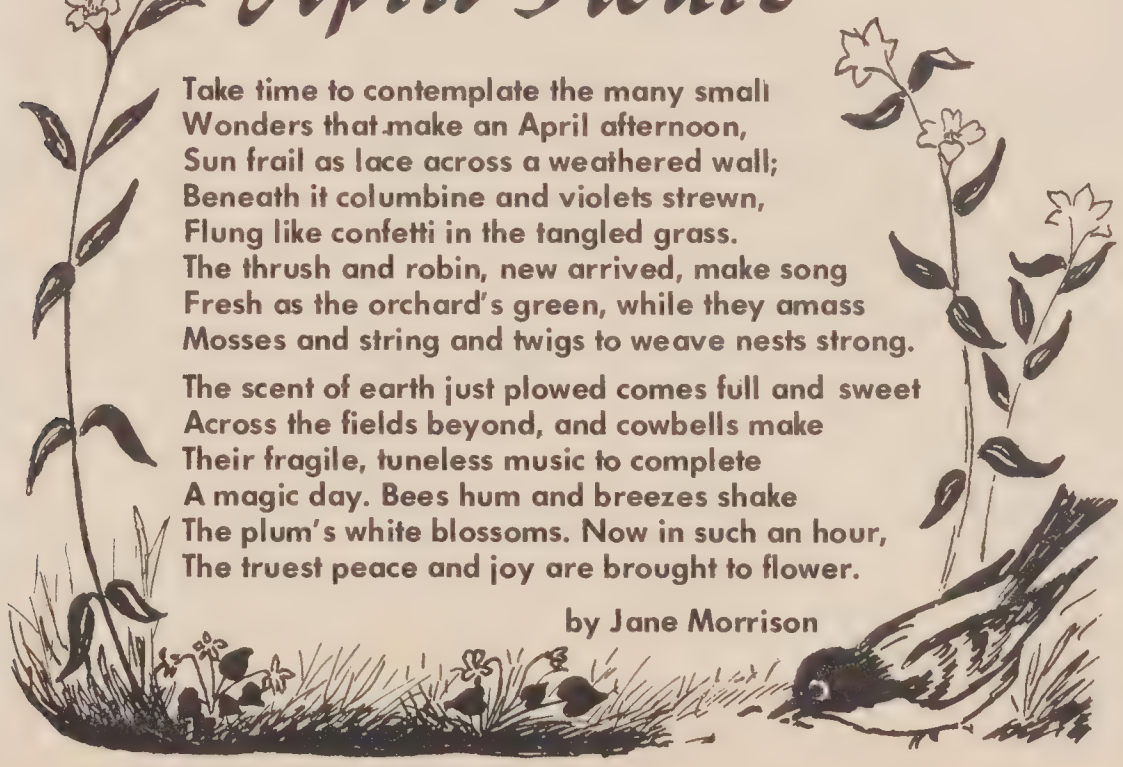
A small motar and pestle is handy around the kitchen; good for pulverizing hardened brown sugar. If you keep a small screw-topped jar of brown sugar in your refrigerator, it will not harden and is always ready to use.

Your Carpet's Other Side

Be sure to inspect both sides of a carpet before you buy it. The quality of the backing is very important in determining how long the carpet will wear and how it feels underfoot.

Today's big trend is toward carpets backed with sponge rubber, latex foam rubber, or plastic foam. People like the luxurious, cushioned feel of foam-backed carpets and not having to bother with separate felt pads. The foam backing should be at least 3/16 of an inch thick and preferably a quarter inch. A high quality backing will keep the carpet fairly rigid, won't crack when carpet is bent, and won't rub off easily.

April Hours



Take time to contemplate the many small
Wonders that make an April afternoon,
Sun frail as lace across a weathered wall;
Beneath it columbine and violets strewn,
Flung like confetti in the tangled grass.
The thrush and robin, new arrived, make song
Fresh as the orchard's green, while they amass
Mosses and string and twigs to weave nests strong.

The scent of earth just plowed comes full and sweet
Across the fields beyond, and cowbells make
Their fragile, tuneless music to complete
A magic day. Bees hum and breezes shake
The plum's white blossoms. Now in such an hour,
The truest peace and joy are brought to flower.

by Jane Morrison

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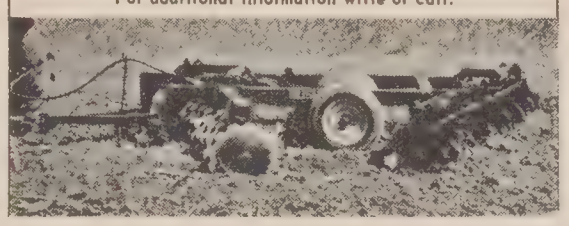

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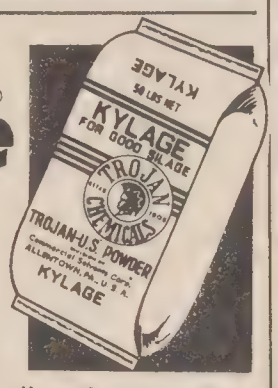

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For a good garden

START WITH GOOD SOIL

by Nenetzin R. White

APRIL SHOWERS bring May flowers! This is definitely so with established woodland plants, bulbs and the like, but it's not so sure for **this** year's plantings of seeds, flowers and shrubs. I have found that most failures in new seeding and newly transplanted seedlings are due not so much to lack of "April Showers," as to the lack of good soil, worked at the proper time.

The **ideal soil** would have good drainage, be nice and friable, and contain plenty of organic matter and loads of nutrients. Sounds wonderful, doesn't it! Much of our area in the Northeast seems to have clay soil without good drainage, while some of the other areas are almost pure sand.

We have to literally "manufacture" good growing soil from what Mother Nature gave us. Surprisingly, most clay soils are loaded with nutrients, but they are in a form unavailable to plants, due to the structure of the clay itself. Many sandy soils also have available nutrients, but because of their porosity and quick draining qualities, they will not hold sufficient water for a plant to utilize these nutrients.

Indoor or Planter Mix

Commercial users of large quantities of soil, such as greenhouse growers, bedding plant and vegetable growers, and "hot house" plantsmen, have struggled for years with soil problems. Every grower has a pet "mix" for his particular material and growing situation.

Scientists at Cornell University, aware of this situation, started out with the idea that ideal soils could perhaps be built to specific formulas. After several years of research and testing, they came up with what is now known throughout the commercial field of floriculture as the "Cornell Mix." This is a lightweight mixture of peat, vermiculite, fertilizer, limestone and a few other lesser additives. This is a wonderful mix for starting plants in window boxes and planters, but too expensive and not really practical for general outdoor plantings.

If you are interested in this mix, send for Cornell Extension Bulletin 1104 (single copies are free to New York State residents and 10 cents each to nonresidents). Address your request to **Mailing Room, Bldg. 7 Research Park, Cornell University, Ithaca, N.Y. 14850.**

Preparing Outdoor Soil

Normally outdoor soil can be fixed up, and you will save time, backache and heartbreak by following a few basic rules. Most of our plants will not tolerate **poorly drained situations,** so if that wet spot is important in your planting scheme, you should tile drain the area. **Organic material** is very important in both clay and sandy soils. By incorporating organic material (peat moss, vermiculite, palite, woods dirt or compost) in clay soil, we help it become porous for drainage and also make nutrients available to the plants. By using organic material in sandy soils, we help retain moisture and nutrients.

Soil pH

Soil acidity or alkalinity can be changed if necessary. Acid soils are usually good for ericaceous plants such as rhododendrons or azaleas, but for regular plantings, our soil pH should be between 6.0 and 7.0. Fortunately, the test is simple, and soils that are now growing good plant material are usually in the 6 to 7 range.

Fertilizers

Fertilizer will certainly improve your plants or gardens, but it can also kill plants. To be safe, use an organic fertilizer (usually these are long lasting in the soil too), or if using a chemical ferti-

(Continued on page 57)

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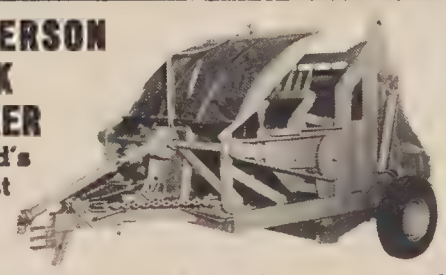

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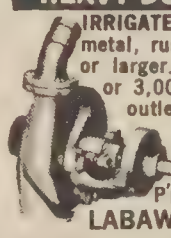

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A RAINBOW GIFT

by Florence J. Johnson*

"I wish I could find that pot of gold at the foot of the rainbow," said a friend whom I was visiting. A thunderstorm had just passed over, and we stood looking at the rainbow that spanned the sky.

"Don't we all!" I laughed. But I went home with a glimmer of an idea on my mental horizon.

My friend, recovering from a serious illness, was finding it difficult to keep in good spirits. She had faith in her doctor's belief that she would ultimately recover, but it was a long slow road she was traveling. She needed encouragement—and not just in words. Prayers would be answered in God's own time, and in those days of waiting, her faith did not falter. Occasionally, however, something was needed to bolster the sagging spirits.

At home I found a white box and a blue cover that would fit. On the cover I painted wide bands of the rainbow colors, putting the bands on diagonally and leaving blue sky on two corners. The rainbow cut across the third corner; in the fourth corner, at the end of the rainbow, was a pot of gold. Some of its golden coins spilled over—faith, health, friends, love, and hope.

After lining the box with sky blue paper, I placed in it several gifts wrapped in rainbow colors. They were not expensive gifts. There was a small face towel stamped with a simple embroidery design and skeins of threads in rainbow colors; there was a couple gay handkerchiefs, a bottle of her favorite cologne, a pin from the local variety store (it had all the rainbow colors in the variegated stones—a gaudy pin that my friend would laugh over and wear).

A small box of candy had each piece of fudge wrapped in rainbow foils, with several in gold; a cup and saucer, inexpensive but attractive for that cup of afternoon tea; a small package of her favorite tea; a book of crossword puzzles with a pencil and an enormous eraser for removing the word that seemed perfect for the definition, but wasn't. There was a book of poetry that I liked to read at odd times; I found a paperbound copy, pasted on a blue cover and painted on it a rainbow. And the Pot of Gold— a jar of orange marmalade.

Did my friend like it?

"You'll never know how much it meant to me," she said. "I was like a child. I wanted to open every package right away, and I wanted to save them, to have something to look forward to. The latter won! I saved my rainbow for the blue days, and when the bluest hour came, I would seek my rainbow. Now I have opened all the packages and enjoyed the gifts. That delightful book of poems, my "Rainbow Book," is always beside me with my Bible. Thank you for your wonderful rainbow gift of encouragement."

*Washington, D.C.

DO YOU HAVE . . .

Recipe for an old fashioned hot milk sponge cake? **Mrs. John L. Healy, 26 May St., Newport, R.I.,** would like it.

An old hand-hewn or large hand made rug loom, table loom, tapestry loom, or back-strap loom which could be seen and possibly copied? **Mrs. R. W. Cullings, Scottsville, N.Y.,** is interested in the older and more primitive methods of weaving.

Recipes for huggermugger cake, lima bean cake, and cabbage pudding? This request comes from **Mrs. Anne Zalenski, 12 Dayton St., Elizabeth, N. J. 07202.**

A "recipe" for hand lotion made from quince seeds? This question comes from **Miss Viola Ross, 55 S. Hamilton St., Poughkeepsie, N.Y. 12601.**

A few pieces of the old-time house plant known as "Crowsfoot" that you could send **Mrs. E. Waltman, Route 1, North Wales, Pa. 19454?**

Directions for making and canning Sweet-Sour Red Cabbage? **Miss Edith Parker, R.D. 2, Beaver Dams, N.Y. 14812,** would like these.

A recipe for boiled suet pudding? **Mrs. M. Stevens, Route 2, Parish, N.Y. 13131,** thinks it came from the Pennsylvania Dutch. She says the pudding was placed in a cloth and boiled in a large kettle of water.

Soil . . . . .

(Continued from page 56)

izer, be sure to follow instructions when preparing bed sites. Do not use chemical fertilizers in the planting pockets!

Last, but not least, do not work wet soil. This may not be too damaging to sandy soil, but clay soil can be wrecked for more than one season. A good test is to pick up a handful of soil and squeeze it; if it remains in a lump when you drop it back on the ground, wait! The soil should be nice and crumbly and only a little moist.

Let's make sure, our soil is what it should be, and then April showers will truly bring May flowers.

CLASSIFIED ADS

(Continued from page 51)

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Dollar Guide

For The Northeast Farmer

"LAND IN JEOPARDY" is title of new 20-minute color film available to Empire Staters from Film Library, Roberts Hall, Cornell University, Ithaca, N.Y. Explains land-use problems and some solutions to them.

NEW YORK POULTRYMEN rejected a proposed State egg marketing order. Preliminary count was 230 "no" and 105 "yes." If proposition had received a "yes" vote of two-thirds of New York producers, a small sum (a third to a twelfth cent per dozen) would have been deducted from egg price to producers for promotion and advertising of eggs.

QUACKGRASS CONTROL recommendations on land that is to be spring plowed go like this: Apply 2 pounds active atrazine per acre to the existing quackgrass foliage (before plowing). Wait 5 to 10 days, then plow, fit the land, and plant. Then apply another 2 pounds atrazine. The following year, continue to grow corn in that field, and apply 2 pounds atrazine pre-emergence.

ALFALFA WEEVIL control can be done by spraying from a homemade rig with a boom located at rear of hay-conditioning rolls. For a free single copy of Ag. Engineering Bulletin 383, entitled "Fitting A Spray Rig To A Mower-Conditioner" contact Professor Joseph Campbell, 328 Riley-Robb Hall, Cornell University, Ithaca, N.Y. 14850.

HOME OWNERS can strike a heavy blow at aphids, scale insects, and mites during April with dormant sprays on a wide range of ornamentals. April is also ideal time for use of pre-emergence crabgrass killer on lawn.

THE ECONOMIC OUTLOOK for the rest of 1969 looks about like this:

1. Defense spending will not be cut much even if peace comes in Vietnam.
2. We have heard some predictions of a balanced Federal budget in the coming fiscal year. We also hear a considerable amount of skepticism!
3. The rate of inflation has been decreasing. Government will attempt to slow it down without causing more unemployment.
4. For agriculture, prospect is for slightly lower milk production, lower exports (maybe $6 billion compared to $6.3 billion in '68), slightly-higher gross farm income, higher costs, and an average U.S. farm income slightly below 1968.

NEW YORK STATE Attorney General Lefkowitz declares that a recent 6% increase in freight rates on grain feed and feed ingredients for the Northeast places farmers in a serious competitive disadvantage with southeastern states where freight rates on feed are lower.

IF CONGRESS seriously considers removing agriculture's exemption for National Labor Relations Act American Farm Bureau will push for substitute, to include: (1) Complete separation from NLRB; (2) Establish rules defining relations between farmers and farm workers; (3) Prohibit secondary boycotts; (4) Protect right of worker to join or not join a union; (5) Authorize aggrieved party to seek relief by court injunction.

IN JANUARY, federal government announced limits on imports of dairy products. Imports will be mostly higher-priced specialty cheeses. Imports (1969) expected to be equivalent to 1.3 billion pounds of milk compared to 2.9 billion in 1967.

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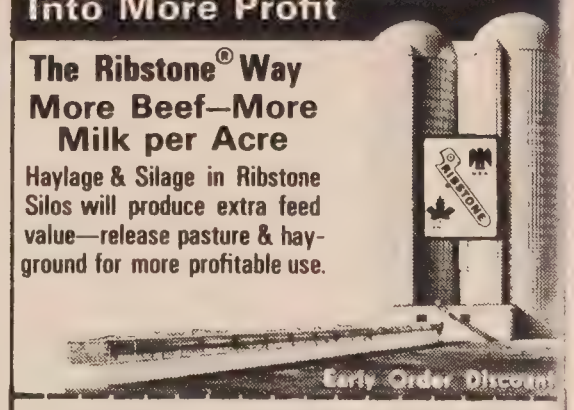

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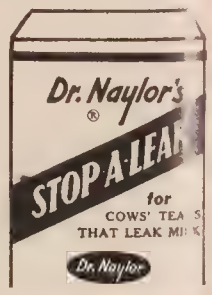

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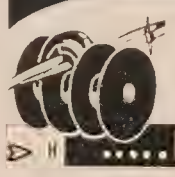

.....FIT ANY TYPE POST

POLLUTION PREVENTION

TIME was when animal . . . uh, waste . . . was considered a superb fertilizer, spread on the soil to enhance its tilth and productiveness. But times change, and now animal wastes are becoming colossal "Excedrin headaches" in some areas. Everywhere, the experts are solemnly intoning that our environment is in great danger of pollution because of the problem. Concern about environmental pollution . . . from pesticides, smoke, nitrates, organic waste, or whatever . . . has become the "thing" to be worried about as population grows larger on a fixed amount of land.

High-Density

Probably the most important single reason for the change in attitude has been the growth in numbers of high-density animal installations. Thousands of beef animals may be fed out in one location . . . up to a million laying hens, or ducks, or broilers may be kept in one building complex . . . swine and dairy cattle housing is tending toward **concentration** of larger and larger numbers of animal units on a small area of land.

And so the feedstuffs are harvested over large areas, then transported to the animals quartered in a small area . . . and the animal wastes that result in one location are in amounts previously unheard of. For the nation as a whole, by the way, there are **two billion tons** of animal wastes produced each year.

It would sound logical to take these wastes and spread them back on the extensive areas of land from whence came the feedstuffs. However, simple economics rears its forbidding head . . . plant nutrients are cheaper from commercial inorganic fertilizers, so it's a very expensive process to disperse large tonnages of animal wastes to far-flung land areas.

Compounding the problem is the fact that, especially in the Northeast, the overwhelming majority of rural residents are not farmers (6 of 7 open-country residents in New York State are nonfarmers). These folks, lulled by the fact that U.S. agriculture has had a problem of food surpluses for a quarter century . . . and having gone to the country in the first place for fresh air and elbow room . . . take rather unkindly to the odor that may develop from a field of freshly-spread manure to the windward.

So what to do about it? Predictions of high-rise barns and multi-level livestock facilities located in urban centers may come true some day, but play no part in solutions for the immediate future. The experts are working diligently on perfecting such things as feeding cattle manure to sheep, or other cattle (in a form called wastelage) . . . dehydration of wastes, which has proved to be relatively expensive . . . and using an oxidation ditch where liquid wastes are mechanically "aired."

A floating aerator that constantly combines air with waste products in a lagoon . . . along with irrigation-system disposal of wastes . . . has proven helpful at Purdue. Deep pits that don't need cleaning for years have worked well under the cages of some poultry houses.

Rutgers research describes a plow-furrow-cover method that injects a waste slurry just ahead of the plow. Treatment of waste materials with odor-masking chemicals is possible, and other chemical manipulations are being tested. Aerobic (with air), and anaerobic (air excluded) storage tanks are also being tested.

At The Farm

Meanwhile, back at the ranch, farmers keep coping with their waste disposal problems according to the conditions facing each one. Most animal wastes are still finding their way back to the land . . . but the problems of odors and economics have modified farmers' disposal patterns somewhat. Liquid manure systems . . . for beef cattle, swine, and poultry . . . have been growing slowly in numbers, but are still far from being commonplace.

Cornell University has just received a $308,000 federal grant to construct a large-scale pilot plant for animal waste research. It will be used for a number of specific research projects, including the removal of nitrogen and phosphorous from animal waste waters . . . both are major pollutants affecting the quality of water and aquatic life.

Endless

It is safe to predict that the problems of waste disposal will provide a fertile field for research until the end of time . . . for one modification almost always leads to further problems. For instance, odor-masking agents can unwrinkle noses, but then what effect does the chemical have on the soil and ground water over long periods of use?

There is a feeling among some that interplanetary travel will come none too soon . . . so that man can perhaps find some celestial dumping ground for the endless profusion of wastes that threaten to blanket the earth! And maybe he can find some other world which people themselves may colonize . . . relieving the "people pressure" . . . so that farmers could once more spread a load of manure without feeling guilty at all! — *G.L.C.*

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Sturdy, well rooted, 3-yr., 8"-14" plants. Ideal for background or hedge. Sun or shade. 25 for $6.00 50 for $11.95 100 for $21.95

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3-5 yr., 8"-16". 5 ea. Scotch Pine. White Pine, Norway Spruce, Colorado Blue Spruce, Frazer Fir. only $7.95

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15, 18"-24" trees. Bark turns white after 3 to 4 years. Hardy. 15 for only $6.95

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CROWNVETCH — perennial ground cover—Flowers June til frost. Beautiful, hardy, no mowing. Grows 12"-18" any climate, sun or partial shade. Chokes weeds, resists droughts.

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Strong 1 yr. transplants 4" to 6" tall. Mass of roots, for only large leaves. Rhododendron, from red flowering stock. Azalea, hardy, mixed colors. ALL 12 $7.95

Trees are cash crops never in surplus, requiring little care. Shelter belts or windbreaks increase crop yield. Trees conserve water and soil besides beautifying and increasing the value of property.

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2-yr. Seedlings	3- 5"	$ 8.00	$40 00
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WHITE FLOWERING DOGWOOD			
1-yr. Seedlings	xxxxx	$16.00	$80 00
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CANADIAN HEMLOCK			
2-yr. Seedlings	4- 8"	$13.00	$65 00

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WE INSTALL BULK TANKS AND DELIVER DIRECT TO FARM

LOW COST
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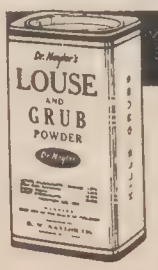

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Dr. Naylor's Louse & Grub Powder is a concentrated Ratenone insecticide with Sulphur—kills lice on animals and poultry...kills grubs in backs of cattle. Safe for use on dairy animals. 14 oz. sifter-top can—only $1.00 at farm stores or mailed postpaid. H. W. Naylor Co., Dept.A-49, Morris, N.Y. 13808.

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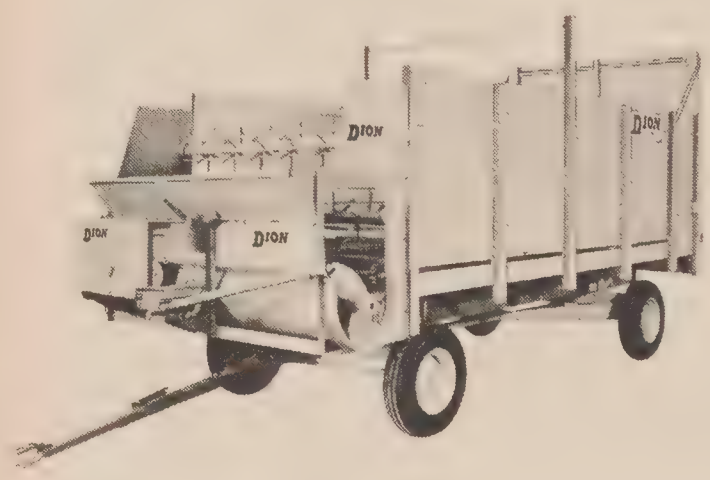

self-unloading forage box

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- ☐ increases blower capacity (and no plugging)

for fast forage handling—including sticky haylage!

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Not "cash 'n carry"... Stash 'n Carry. It's brand new... a rugged plastic carrying case for the Remington SuperLite SL-9 chain saw. You stash your SL-9 in the case and then you can carry it anywhere—fishing, camping, hunting, down the road to the neighbor's, or on a jungle safari. And no matter where you stash the case, you know your saw is safe, the chain sharp. But what's really great about this $19.95* Stash 'n Carry case is that it's FREE during April and May when you buy an SL-9 from participating Remington dealers. Would you call that a "cash 'n carry Stash 'n Carry?" Anyway, see it at your Remington dealer's.

* Suggested retail price

Remington
DU PONT

Remington Arms Company, Inc.
25000 So. Western Avenue, Park Forest, Illinois 60466

☐ Please send me more information on Stash 'n Carry Case
☐ Also send Remington's full line chain saw folder

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I am also interested in becoming a Remington ☐ Dealer ☐ Distributor

FP 3 8

Changeless, yet ever changing from sunrise to sunset, the magnificent colors and awesome majesty of the Grand Canyon defy description. See it on our Heart 'O the West Holiday.

TRAVEL WITH US THIS SUMMER

We cordially invite you to join our midsummer **Heart 'O The West Holiday** for a glorious trip to some of the most thrilling places in the United States. From the moment we board the Denver Zephyr in Chicago on **August 2** until we arrive back there on **August 24,** every day will be packed with magnificent scenery and happy adventures, delicious meals and first class hotel accommodations.

The first highlight of our tour will be the **Black Hills** section of South Dakota with its many attractions—Needles Highway, Mount Rushmore, the Crazy Horse Memorial site, a ride on the Black Hills Central, the Homestake Mine at Lead, and the famous Passion Play at Spearfish.

On our way to **Yellowstone National Park,** we visit Buffalo Bill Museum at Cody, Wyoming. Entering the Park, we stay all night on Yellowstone Lake and follow the Grand Canyon of the Yellowstone next morning to Mammoth. We enjoy a stagecoach ride at Roosevelt Dude Ranch and continue to Old Faithful for overnight. The majestic Grand Tetons and beautiful Jackson Lake in **Grand Teton National Park** are the following day's attractions.

After a sightseeing tour of historic **Salt Lake City,** we spend a day each in **Bryce Canyon** and **Zion National Parks.** Then comes inspiring **Grand Canyon,** Mesa Verde National Park, and the **Royal Gorge.**

The beautiful mountain cities of **Colorado Springs** and **Denver** will be featured next. We'll travel to the top of Pike's Peak and also see Cheyenne Mountain, Will Rogers Shrine, Garden of the Gods, and the Air Force Academy.

It's hard to imagine a trip through the United States that combines more natural beauty with famous places that everyone wants to see than our Heart 'O The West Holiday. We hope you will join us.

Eastern Canada-Bermuda Cruise

Already a fine group of people have reserved places for our **Eastern Canada-Bermuda Cruise** aboard the SS Homeric from **July 12-25,** but there is still room for others who want to go along. The Homeric is a beautiful ship, fully air conditioned and featuring every attraction you might expect to find at a luxury resort.

Sailing from New York, our first stop is at **St. Pierre,** a corner of France at our very doorstep. We leave St. Pierre, cross the Gulf of St. Lawrence, and go up the St. Lawrence River to begin our fascinating **cruise of the Saguenay River** at the historic village of Tadoussac. We travel through a wonderland of towering cliffs and majestic mountains that rise right from the water's edge and rival the fjords of Norway.

Our next stop is at **Quebec,** the only walled city on the North American Continent. A visit to Quebec is like a trip to France. Here the Old World atmosphere of the 18th Century prevails, and softly spoken French welcomes the visitor to this beautiful city.

From Quebec, we continue up the St. Lawrence to **Montreal** and take a delightful tour

(Continued on page 61)

Gordon Conklin, Editor
Box 370-T
Ithaca, New York 14850

Please send me without obligation on my part, the following tour itineraries:

Heart 'O the West ____ Canada-Bermuda Cruise ____ British Isles Tour ____
June Alaska Tour ____ Alpine Tour ____ Scandinavian Holiday ____
August Alaska Tour ____ Grand European Tour ____ Greece-Turkey Tour ____
American Heritage Tour ____

Name _____

Address _____

_____ Zip _____

(Please print)

Hosts for the 1969 Empire Farm Days are partners Bill Selden (right) and Ken Litton of Elm Place Angus.

EMPIRE FARM DAYS

The 1969 Empire Farm Days are scheduled for August 5-7, at the Piffard Farm owned by William and Cynthia Selden of Avon, New York. This farm is only a part of the Elm Place Angus acreage owned by the Seldens . . . the rest including 360 acres at the homestead and another 140 acres near the home farm.

Elm Place has been in Bill Selden's family ever since 1794, when ancestor Colonel William Markham settled there. It has been renowned at various times for its Rambouillet sheep, a White Shorthorn ox known as "General Grant," and a dairy herd from 1900 until 1960. Kenneth and Phoebe Litton, who came to Elm Place from Virginia in 1962, are stockholders and officers in the farm corporation along with the Seldens.

There are eight horizontal silos here, with a total capacity of 2000 tons . . . most of which is hay-crop silage, but some corn silage is also made. Homemade feeding gates give 12 head access at one time . . . adequate for the 50 head in each group.

The Piffard Farm, where the nearest hamlet is Retsof, is mostly Odessa silt loam, very gently sloping phase. The "Soil Survey of Livingston County" calls this soil the imperfectly drained associate to the Schoharie soils. Its fine texture makes it more difficult to till than some soils . . . in fact, it's known locally as "hard ground."

The 986 acres on this farm, plus its somewhat heavy soils, will give exhibitors plenty of room to demonstrate their equipment . . . and under conditions that occur on many northeastern farms. As always, it promises to be one of the outstanding farm machinery shows of the region.

Heart 'O the West . . . . .

(Continued from page 60)

ashore to see "Man and His World." Our last port of call in Canada is the interesting fishing village of **Gaspe,** a bit of colonial Canada located at the eastern end of the Gaspe Peninsula.

Heading south for warmer climes, we spend the next two days sailing across the open sea. Our destination is **Bermuda,** and we have a full day to enjoy the many delightful places on these beautiful islands, before heading back to New York and home.

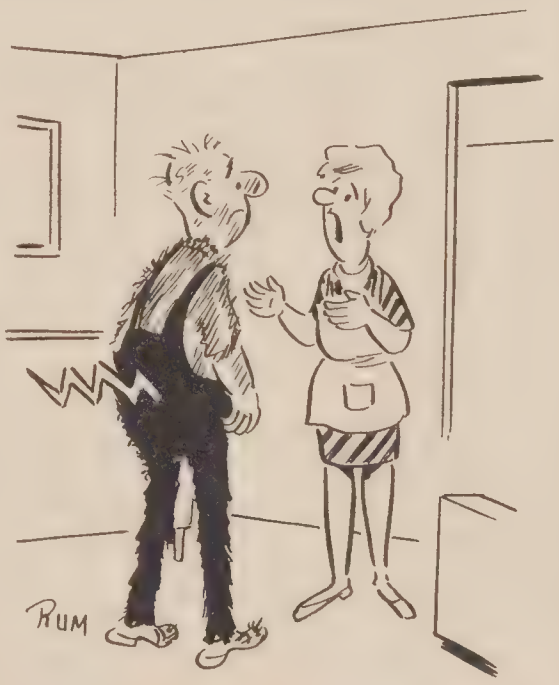
British Isles and Scandinavia

Just a reminder that there is still space available on our **British Isles Tour from May 6-15** and our **Scandinavian Holiday from June 3-24.** In the British Isles, we will visit the best loved places in England, Scotland, and Ireland—Windsor, Canterbury, Stonehenge, Shakespeare Country, Edinburgh, Loch Lomond, Dublin, Killarney, and County Kerry to name just a few. In addition we take a side trip to Holland to see the famous tulip fields in bloom.

Some of the attractions included in our **Scandinavian Holiday** are Hans Christian Andersen Country and Copenhagen in Denmark; Stockholm, Dalecarlia, and Uppsala in Sweden; the beautiful fjords of Norway, and The Hague, Madurodam, and Amsterdam in Holland. Also, in Norway we will have the opportunity to take a trip north of the Arctic Circle and see the sun shining brightly at midnight.

Mail Coupon Today

For all of these trips, we have been able to mention only a few of the places we will visit. Our itineraries will give you full details and information about costs. All American Agriculturist tours are arranged by our tour agents, the Travel Service Bureau of Needham, Massachusetts. All are escorted trips, and everything is included in the price of the ticket —transportation, all scheduled sightseeing, first class hotel accommodations, meals and tips. Fill out the coupon and mail it today.

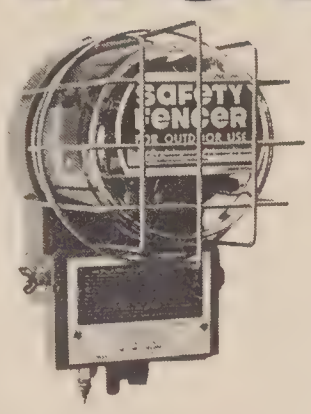


"You poor dear. Where did the lightning stirke you?"

The Super Shocker!

New, Super-Powered Thunderbird has the hottest shock ever accomplished in an electric fencer . . . *so powerful it will provide a real jolt around a section of land, including the cross fencing!* Revolutionary new solid-state circuitry shocks even through wet weeds and will hold livestock in any weather. If you want *big* shocking power, complete dependability, and long-lasting quality, ask your dealer for the *all new* HOL-DEM THUNDERBIRD!

HOL® DEM "Hot Line" ELECTRIC FENCERS



The safest fencer ever built!

If you want a fencer that will provide better livestock holding power, yet meet strict Underwriters Laboratory approval, the new HOL-DEM SAFETY FENCER is the answer. Specifically designed for outdoor installation, required by many insurance companies, it incorporates the latest technology in solid-state circuitry including a controlled shock feature which is positively safe to farm animals. Wet weeds will not short this fencer under normal conditions nor create a fire hazard due to "weed spark".

There's a HOL-DEM ELECTRIC FENCER for every need. Write for FREE brochure.

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NOW- CLEAN YOUR VEGETABLES SAFELY
TOMATOES-POTATOES-SQUASH-CUCUMBERS

USE a TEW cleaner to prepare your produce for market. Select either a DRY BRUSHER or WET WASHER depending upon produce and method of pack.

BUILT IN 3 SIZES TO MATCH YOUR NEEDS

SERIES	WIDTH	CAPACITY	PRICE*
165	16½"	90 bu/hr	$395.00
185	18½"	110 bu/hr	$683.00
245	24½"	175 bu/hr	$775.00

* PRICES include machine with motor, switch & cord ready to run, f.o.b. factory. Add $10.00 for crate if machine is shipped commercial carrier.

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FAIRPORT, NEW YORK 14450

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100 GLADIOLUS BULBS

Michigan Nursery Grown . . . only $1

FOR SPRING PLANTING

Mail coupon before May 15 and get 100 GLADIOLUS BULBS for only a penny a bulb! These glads were grown in the fertile soil of Michigan. Are mixed in a stunning array of reds, yellows, pinks, purples, white, crimson, violet, multicolor, etc., as available. These bulbs are small and with normal soil, care and growing conditions will give you many blooms this year and grow on to larger bulbs that give startlingly beautiful gladiolus colors year after year. Any bulb not flowering 5 years replaced free. Mail coupon now to get this wonderful bargain delivered for Spring Planting. Satisfaction guaranteed or return within 10 days for purchase price refund.

☐ 100 GLADS $1.00 ☐ 200 FOR $1.94 ☐ 500 FOR $4.50
☐ Send C. O. D. plus postage.
☐ Cash order add 35 cents and we ship postage free.

Name_____
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DUTCH BULB IMPORTERS—Dept. GX-1400 Grand Rapids, Mich. 49502

NEW NICHOLSON UT3 Hay Tedder

Makes Hay Fast Improves Hay Quality

Cuts time for making high quality hay. Ideal machine for tedding crop that has been conditioned and windrowed to hasten wilting for haylage. Drive wheels spaced to run clear of crop.

Fluffs up wet windrows, caught by rain before baling, to speed drying and eliminate moldy bales. The Nicholson is the only tedder that can do this. Gentle action of tines does not damage leaves or stems. Handles up to 8 ft. wide swath —covers up to 5 acres per hour.

New Features: High Tensile Tubular Rake Bars run in sealed ball bearings for high speed operation. Adjustable deflectors keep hay in windrows. All moving parts, including chains, fully shielded from crop. Patented double coil spring tines work perfectly on rough or stony ground. Easy adjustment.

Write for full information and nearest dealer's name. Dealer inquiries invited.

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The **DOUBLE-ACTION DILATOR**
for SCAB TEATS
INJURED TEATS
HARD MILKERS

Use Dr. Naylor's Medicated Teat Dilators to keep teats open . . . and keep 'em milking. These DOUBLE-ACTION dilators act two ways:

1. ACT MECHANICALLY—keep end of teat open to maintain free milk flow. Stay in large or small teats.

2. ACT MEDICALLY—Sulfathiazole in the Dilator is released *in* the teat for prolonged antiseptic action—directly at the site of trouble.

EASY TO USE . . . simply keep a Dr. Naylor Dilator in teat between milkings until teat milks free by hand. *At drug and farm stores or postpaid.* Large Pkg. $1.25 Trial Pkg. 60¢

H. W. NAYLOR CO., Morris 8, N.Y. 13808

Dr. Naylor's MEDICATED Teat Dilators

Ed Eastman's Page

THEY KICKED GOD OUT OF OUR SCHOOLS

On November 30, 1951, the New York State Board of Regents, of which I was then a member, unanimously adopted a statement on moral and spiritual training in the schools of the State, which I quote in part below:

"Belief in and dependence on Almighty God was the very cornerstone from which our founding fathers builded * * *

"In our opinion the securing of the peace and safety of our country * * *points to the essentiality of teaching our children* * * *that Almighty God is their Creator* * *

"We believe that at the commencement of each school day the act of allegiance to the flag might well be joined with this act of reverence to God.

* * * *"We believe that thus constantly confronted with the basic truth of their existence, and inspired by the example of their ancestors, our children will find all their studies brought into focus, respect for local authority, and obedience to law.* * *

"We believe that thus the school will fulfill its high function of supplementing the training of the home. * *

"We believe that such is the best way of insuring that this government and our way of life shall not perish from the earth."

Following the statement, the Board of Regents suggested that the following prayer be used at the beginning of each school day!

"Almighty God, we acknowledge our dependence upon Thee, and we beg Thy blessings upon us, our parents, our teachers, and our country."

In one district, the parents of ten pupils brought action in the New York State courts, insisting that the use of this official prayer in public schools was contrary to the beliefs, religions, or religious practices of themselves and their children, and they challenged the constitutionality of the prayer.

The State courts upheld the right to the use of the Regents' prayer as a part of the daily procedures of its public schools, so long as the schools did not compel any pupil to join in the prayer over his or her parents'objection.

The matter then went to the United States Supreme Court, which ruled that the prayer was unconstitutional and forbade its use in the schools of the state or nation.

Government By Minority

I want to emphasize the fact that Protestants, Catholics, and Jews were members of the Board of Regents which approved this prayer unanimously. Without doubt, a great majority of people also approved the use of a simple prayer like this in the schools. So we have government by minority, which is able to prevent the majority of parents from having their children have the benefit of this great fundamental lesson and truth.

When President Nixon took the oath of office last January 20th, he did so on the Nixon family Bible and his mother's family Bible. It would seem, therefore, if God and the Bible are good enough for the President of the United States, they should also be good enough for use in our schools.

The coins of the United States carry the words, "In God we trust."

Ever since I can remember it has been the custom, until recently, to open school in the morning with a brief Bible reading and a short prayer. How well I remember J.S. Kingsley, our beloved high school principal, reading a brief selection from the Bible, then offering a short prayer.

This little ceremony repeated morning after morning had a good effect on all of us for the whole day and for all our lives. It could have decreased our crime rate.

It is apparent that a very small minority of people are able to throw God out of the schools. I sometimes wonder why, in a republic where the majority is supposed to rule, so much attention is paid to minorities, to the detriment of the great majority.

Please don't write me a long letter about religion. You and I have a right to believe what we wish. I am only saying that our children also have a right to know that there is a God and that He is good.

Unfortunately, because the power of the Supreme Court is supreme, there is only one way that we can get around its decision about prayer in schools. We can do much, much more in our homes to make God real to our children. We can say Grace at every meal, we can have regular reading and discussions of the Bible, and we can teach our children to pray meaningfully.

EASTMAN'S CHESTNUT

In the December issue of the Dairymen's League News was the following story, told first in our office by Editor Gordon Conklin, and passed on to our salesmen by Publisher Jim Hall. I think it is one of the best I have heard in a long time:

A small daily rural paper published this classified ad:

"For Sale: Slightly used farm wench in good condition. Very handy. Phone 2456, Charles Smith.

"The next day the paper printed a correction. 'Due to an unfortunate error, Mr. Smith's advertisement last night was not clear. He has an excellent winch for sale. We trust this will put an end to the jokesters who have called Mr. Smith and greatly bothered his housekeeper, Mrs. Jones, who lives with him.'

"The following day this advertisement appeared:

" 'NOTICE: My winch is not for sale! I put a sledge hammer to it. Don't bother calling 2456. I had the phone taken out. I am not carrying on with Mrs. Jones. She merely loves with me.—Charles Smith.' "

WHAT ABOUT YOURSELF?

April is the last chance the farmer has to get ready for the big planting season ahead. Do you know where you are going to plant and what? Are seed and fertilizer supplies on hand? Is the tractor in good repair and fully serviced? Is all your equipment ready to go?

And what about yourself? When did you have a good checkup by a doctor?

WE HAD SIMILAR EXPERIENCES

In a lifetime of editing and writing for farm folks I have received many nice letters, but never so many on one subject as have come from the readers of my book, "Journey to Day Before Yesterday." Probably one reason why I like them is that many of the letters remind me of my own boyhood days and of my many unseen friends. Here is an example of what I mean:

"A year ago I bought a copy of "Journey to Day Before Yesterday" which I enjoyed very much and am now re-reading it. I have been through nearly all of the experiences that you have written about and your book helped me relive them. I am the sixth member of a family of eight children, and always had to work hard to get enough to eat—ten hours work for fifty cents.

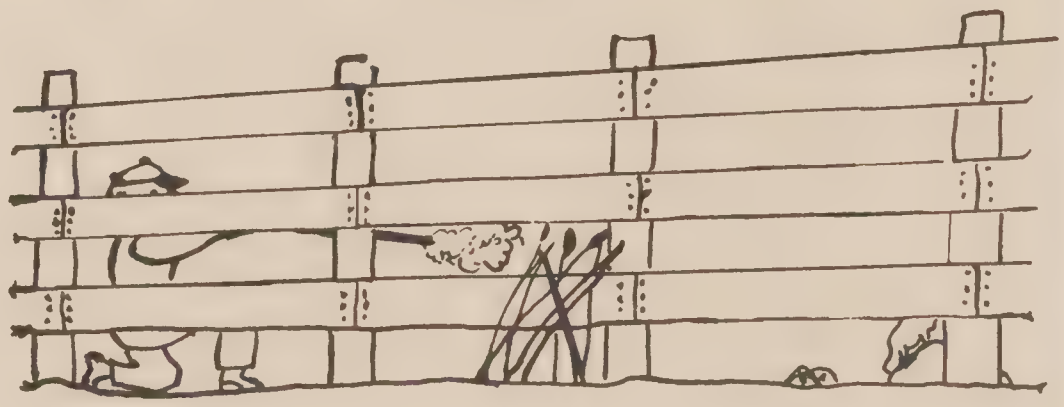
"While we are strangers, I feel I know you very well just from reading your writings."—L.C.O.

Another letter reads:

"I read your wonderful book with a great deal of pleasure. I too lived in those days that you write so wonderfully well about. I live on a farm which originally came from a grant from the King of England. Keep up your good work."—R.H.S.

"I have just finished reading your book, "Journey to Day Before Yesterday" which I bought for my stepson. You and I grew up in about the same thrifty farm circumstances that I still think was a good way, and gave us the strength to go through life and carry our share as we go along. I don't really think I ever enjoyed a book more than yours. And among other things I got a lot of good laughs out of it.—Mrs. H.C.

To get a copy write to American Agriculturist, Department Book, Savings Bank Building, Ithaca, New York 14850. The price is $7.30 including tax.



70 YEARS A READER

The drawing printed on this page was first printed by American Agriculturist in its issue of March 11, 1899 . . . seventy years ago. The letter that came to the editor with the drawing read:

"I am now eight years old and papa said I might try my luck at drawing. The subject is a man shooting a woodchuck. "Your little friend, Herbert S. Dana."

On January 23, 1969 I received this letter from Mr. Dana:

"This afternoon I came across a copy of the Agriculturist for March 11, 1899. My father was a subscriber at this time and on page 25 at the bottom you will see a drawing that I executed and sent to our 'young folks page' seventy years ago. We grow too soon old.

"With best wishes—Herbert S. Dana."

COMMENT: It is indeed interesting to know that American Agriculturist has been a member of Mr. Dana's family all these years.

SERVICE BUREAU

For The Northeast Farmer

by M. A. Parsons

SERVICE BUREAU CLAIMS RECENTLY SETTLED

NEW YORK	
Mr. W. B. Raynor, Manorville (refund on ladder)	$16.88
Mrs. Donald C. Nichols, Ft. Edward (refund on returned items)	25.05
Mr. Geo. C. House, Oswego (refund unfilled order)	3.55
Mr. Carl Zimmer, Hamilton (refund on return)	10.20
Mr. Ralph H. Sutton, Chappaqua (refund of deposit)	40.00
Mrs. Helen M. Kennedy, Hudson (refund on labels)	2.95
PENNSYLVANIA	
Mrs. Louis Krumenacker, Carrolltown (refund on order)	20.95
Mrs. Daniel Moyer, Sr., Pottstown (refund unfilled order)	5.98
MAINE	
Mrs. Geo. H. Littlefield, Brooks (refund on film)	8.50
NEW HAMPSHIRE	
Mrs. Eva Batchelder, Hampton (refund on returned items)	13.00
VERMONT	
Mrs. Warren Hatch, W. Barnet (refund on order)	17.95
FLORIDA	
Mrs. C. Gudmundsen, Seminole (refund on records)	15.37

CREDIT CARDS

"Last summer I lost my billfold. In this billfold was a credit card from a chain store. We didn't ask for the card; they sent it to us when they opened their new store in this locality. We had the card for over a year and I had forgotten that I even had it. I had never used it.

"Whoever found the billfold used the credit card and apparently forged my signature on a charge. We received the first bill for $55.00 in September. We can't afford to pay this and don't see any reason why we should. What is your opinion?"

This letter caused mixed reactions. In the first place, when one requests a credit card, uses it, and then loses it, it is his immediate responsibility to notify the company issuing the card that it has been lost so the company will give no credit on it. Failure to so notify the company is negligence.

However, in this case, our subscriber did not request the credit card but it was mailed to him by the company. The company had no right to assume that all of the credit cards they mailed out would land in the right hands. Actually, the subscriber had no responsibility toward this credit card when he received it since it was unsolicited.

He never should have put it in his wallet but, having done so, he probably should have notified the company when he lost his wallet. However, it seems to us that the company is more to blame in this matter inasmuch as they had sent the card out unsolicited and it was over a year before it was used. It is our opinion that they should have checked on the person presenting the card more than they did.

A WINNER

"I received a notice that I had won days and 4 nights in Florida and it would cost me $15.00. I was told that for another $15.00 we could take another couple with us.

"This contest was run in a store in a nearby city. Is there some way we can find out if this is legitimate or if we have been taken? We would like to take the vacation next fall, but if it is a fake we would like to get our $30.00 back."

The business of this company is advertising promotion and sales incentives. They are active in the production and distribution of "vacation certificates" in cooperation with Florida real estate companies, retail merchants, and several Florida hotels.

The public is invited to register at a booth at a fair or counter in a store, and later those who register receive a notice such as our reader did.

The literature states, "You are not compelled to attend anything or to do anything other than to completely enjoy yourself." The $15.00 certificate entitles the holder to the use of a Florida hotel or motel room. However, it does not cover transportation to Florida, taxes, tips, beverages, food, etc.

Vacationers who are interested in the proposal should thoroughly study all of the literature carefully in order to have a complete understanding of the conditions and limitations.

CO-SIGNED

"Months ago, a relative came home from the service and, of course, we were glad to see him.

"I co-signed for a car because, although he was over 21, he needed a co-signer to establish his credit. He has paid two months on his car and I am saddled with the rest. He makes no effort to pay any of it. Is there any way I can get out from under this load, besides charging it up to experience?"

I'm afraid it will have to be charged up to experience. When one co-signs a note, he promises to pay if the maker of the note does not.

CAN YOU HELP ?

If you have a silver cruet set with salt, pepper, vinegar and oil bottles, send full particulars and price to Box 310, Dover Plains, N.Y.

* * *

Mrs. Floyd Caskey, Springwater, N.Y., is trying to find a picture which Farm Journal gave with subscriptions in 1906. It was kittens, showing the five senses.

* * *

Mrs. Nelson Gilmore, R.D. 1, Cambridge Springs, Pa. 16403, would like this song: "We are wandering home . . . . . Soon we shall wander no more."

Family Suffers Tragedy In Pick-up Truck Crash

Local agent Bernard Virkler of Castorland, N.Y. delivered $8451.00 to Mr. Claude Bardo, farmer from Turin, N.Y.

In their pick-up truck Mr. Bardo, his wife and daughter were but a mile from the farm when at the crest of a hill on a rolling secondary road they collided head on with a car.

Four weeks and five days later Mrs. Bardo died in the hospital. Mr. Bardo suffering injuries of the legs, elbow, chest, back and ribs spent fifteen days in the hospital and many weeks disabled at home. Mary Alice, their daughter, injured her teeth and legs. Although disabled but a week she needed dental repairs.

Mr. Bardo drew $1749.99 of disability income benefits and $1128.57 of medical expense benefits for a total of $2878.56. Mary Alice drew $161.00 in medical and disability income benefits. Policies on Mrs. Bardo paid $3750.00 for loss of life and $1661.44 for disability income and medical expenses.

Receiving the $8451.00 payment Mr. Bardo wrote this letter.

"I want to thank North American Ins. Co. for the settlement of the accident for my wife, daughter and myself. It was greatly appreciated at a time like this. I also want to thank Mr. Virkler for his help during my claim and for stopping by from time to time to explain the new policies. I have drawn on the policies for small claims in the past. But never thought an accident like this would happen to us. I now know the value of carrying full coverage."

Claude H. Bardo

Vernon B. Burnside, Arkport, N.Y. Caught in elevator chain—inj. foot	$ 926.85
Lillian Pierson, Binghamton, N.Y. Fell on step—broke wrist	754.00
Larry Brown, Randolph, N.Y. Pushed by cow—broke leg	290.69
James Lippert, Allegany, N.Y. Stone hit face—broke tooth	310.00
Keith Titus, Cato, N.Y. Furnace exploded—burns of face, hands	208.57
G. Lavonne TenPas, Falconer, N.Y. Fell from hay mow—broke leg	1009.01
Lola C. Smith, Pine City, N.Y. Fell over chair—inj. arm, shoulder	167.14
L. Harris White, Plymouth, N.Y. Fell on stairs—internal injuries	1184.29
Roma Castine, Sr., Plattsburg, N.Y. Caught in cutting machine—broke arm	613.75
Norris E. Burnham, East Homer, N.Y. Caught on nail—inj. hand	491.75
Neil Turner, Davenport, N.Y. Fell from dump truck—inj. back	899.50
Wilma Thill, North Collins, N.Y. Stepped on nail—inj. foot	228.00
Perry Cramer, Northville, N.Y. Caught in spring—inj. thumb	207.42
Alice Warner, Oakfield, N.Y. Auto acc.—broke leg	260.00
Frank Parese, Dolgeville, N.Y. Fell from step ladder—broke leg	237.50
Hugh V. Roach, Sr., Watertown, N.Y. Fell—injured wrist	385.09
Lewis Keefer, Croghan, N.Y. Attacked by bull—injured chest	470.72
Ernest D. Rouse, Cazenovia, N.Y. Caught by cow, stanchion—inj. hand	329.53
Alger Bagdan, Amsterdam, N.Y. Fell on wet beam—inj. knee	167.14
Leo Kowalski, Lockport, N.Y. Tray fell—cut hand	215.14
J. Lansing Reed, Remsen, N.Y. Ran into by pig—broke leg	212.13
Walter J. Ames, Brewerton, N.Y. Tractor overturned—broke toe	290.00
Francis Courneen, Holcomb, N.Y. Fell down step—inj. back	$ 312.30
Charles Worden, Sandy Creek, N.Y. Slipped sharpening knives—cut hand	186.43
Paul R. Skiff, Sr., Valley Falls, N.Y. Pinned by truck—injured chest	355.90
Harold Moore, Hammond, N.Y. Kicked by cow—inj. leg	435.12
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Timothy P. Johnson, Sloansville, N.Y. Kicked by horse—inj. elbow	120.00
Alpheus Hayes, Montour Falls, N.Y. Caught in conveyor belt—inj. hand	316.76
James Laverty, Hornell, N.Y. Tractor went over bank—inj. chest	514.61
Henry Blencowe, Cameron Mills, N.Y. Caught in snow blower—inj. hand	763.51
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Frederick Orcutt, Fort Ann, N.Y. Fell on ice—broke thumb	125.21
James R. Lefever, Palmyra, N.Y. Hit by hammer—broke tooth	115.00
Laurence Lefort, Strykersville, N.Y. Attacked by heifer—inj. back	231.42
Thomas Walker, Genesee, Pa. Riding horse—injured ankle	203.55
Arthur Potts, Montrose, Pa. Fell from scaffold—broke foot	566.86
Arthur Danser, Cranbury, N.J. Slipped and fell—injured back	821.00
Raymond Hoppaugh, Califon, N.J. Kicked by cow—inj. knee	165.00
Evelyn Kelly, E. Brockton, Mass. Auto acc.—injured neck	128.56
Richard McNamara, Suncook, N.H. Fell from ladder—broke arm	121.28
Martha McSwain, Windsor, Vt. Knocked down by hog—broke leg	666.21
Marion Lane, Charlotte, Vt. Slipped—injured shoulder	223.21
Francis Bassett, Pittsford, Vt. Caught by grain cart—broke leg	209.28

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For The Northeast Farmer

MAY 1969

American Agriculturist
and the
RURAL NEW YORKER

Three partners now earn a comfortable living from a 290-acre dairy farm.

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It can do as much for you.

Fred Bohn and his two sons operate Swatara Dairy Farms near Meyerstown, Penna., as a partnership. In eight years, they've brought it from low productivity to a point where it can easily support a 100-cow dairy herd. There are now 83 milkers with a herd average of more than 15,500 pounds, plus dry cows and young stock.

Through Agway's Enterprise Service, the Bohns have been able to tap the many resources Agway can make available to them whenever required: the latest research in herd management; least-cost feed formulations consistent with farm-produced grains and forage; computer-generated reports on income over feed cost for the whole herd and for individual cows; guidelines for better use of labor, machinery, capital; continuing and frequent counsel with dairy and crop specialists such as Clair Hindman of Agway. Here are some of the ways Enterprise has

worked for the Bohns:

"We were having a breeding problem," said Mr. Bohn. "It was taking several services to get cows bred. We had our forage analyzed at Penn State and sent these findings along to Agway, together with all the facts about the grains and concentrates we were using. We got an Agway 'Profile Report' on our feed, which showed the trouble was caused by the wrong mineral balance. Too much calcium and not enough phosphorus.

"But the report told us of a problem we didn't know about. Low protein. It also suggested how to correct this by using our own grains plus Agway 36% Supmix Concentrate. In a single month we gained more than 14,000 pounds of milk. This was like adding cows to the herd without a penny of cost."

From his Monthly Herd Profile reports, Mr. Bohn can tell to the penny what it costs to keep the farm running. He knows the performance of each cow as well as of the entire herd. He can set goals that are realistic and attainable with his present resources. And these reports cost Mr. Bohn less than $100 per year.

Agway Farm Enterprise Service can fit whatever kind of farming you do: dairying, poultry, crops, fruit, beef or swine. Enterprise will give you the facts and the specific cost-cutting programs you need to make your operation more profitable. It puts all aspects of your operation into perspective: feeds, buildings, animal health, crops, equipment, financing, management aids, power fuels, insurance.

Want to know more about Enterprise and what it can do to help increase the profitability of *your* farm? Visit your Agway store or representative, or get in touch with N. E. White, Agway Inc., Box 1333, Syracuse, N.Y. 13201.

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Fred Bohn and Clair Hindman get together at least twice a month to review current activities, plan ahead. Profile reports play a key role in these discussions.

The Bohns (Fred, Ray, Fred J.) with Clair Hindman. Men like Hindman act as advisers, can bring in specialists to help solve specific problems.

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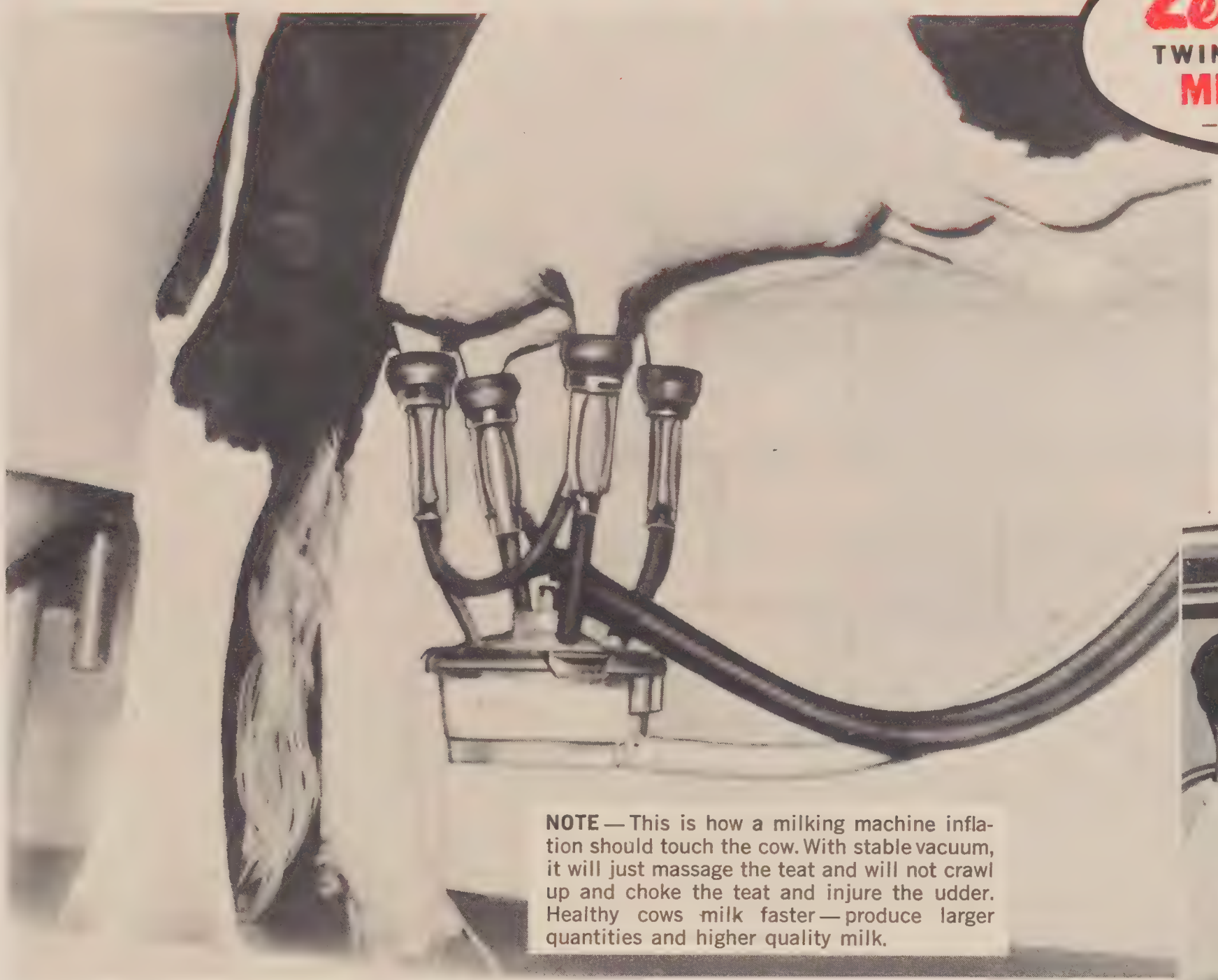

NOTE—This is how a milking machine inflation should touch the cow. With stable vacuum, it will just massage the teat and will not crawl up and choke the teat and injure the udder. Healthy cows milk faster—produce larger quantities and higher quality milk.

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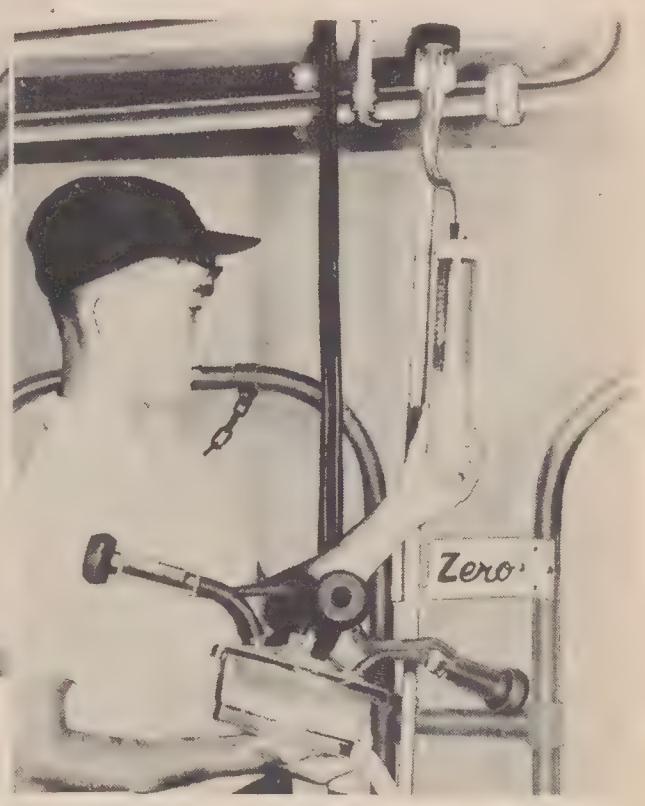

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For The Northeast Farmer

American Agriculturist and the RURAL NEW YORKER

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OUR COVER

Charles and Phyllis Ver Plank of Marion, New York, enjoy the starting point of another crop year in the fruit business. Photo: Doris Barker.

TRADITIONALLY NEW . . . FIELD TO FEEDLOT

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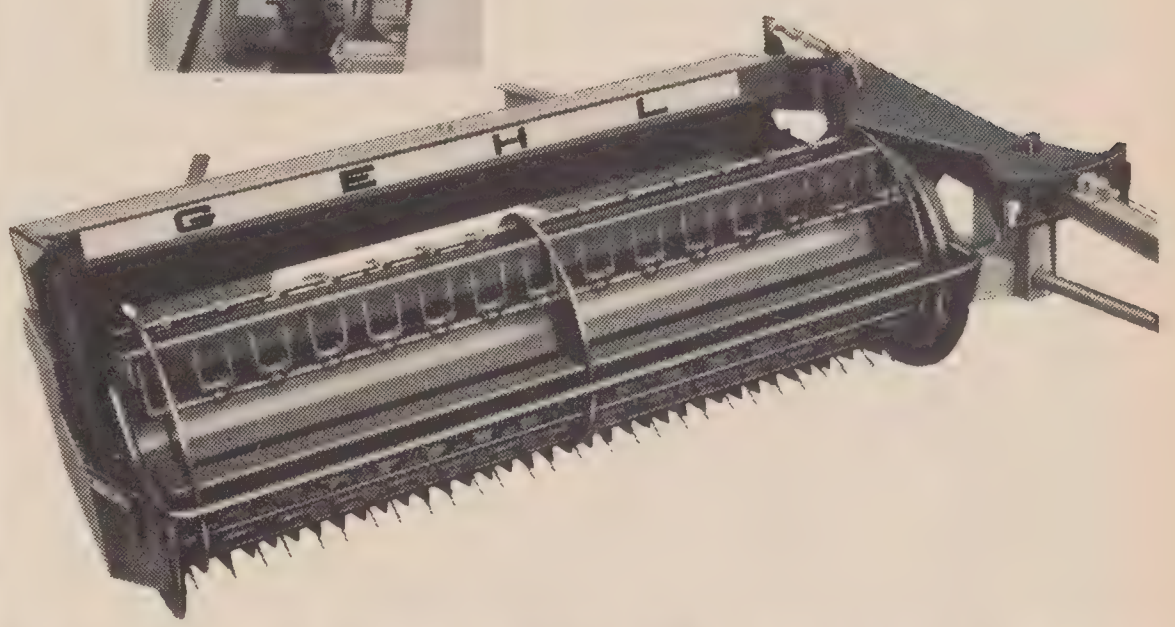

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EDITORIALS

by GORDON CONKLIN

NY – NE DCCC

It was in 1966 that the New York-New England Dairy Cooperative Coordinating Committee was formed in an attempt to create a more united front among the dairy cooperatives of the Northeast. Earlier moves to create regional federations had brought into being several similar organizations in other parts of the country . . . such as Associated Dairymen, and the Great Lakes Milk Marketing Federation.

Fortunately, the Coordinating Committee began its efforts amidst the favorable economic circumstances of sharply-shrinking milk supplies. Milk price increases have been considerable in 1967 and '68, and the fact that 25,000 dairymen were represented at milk price hearings by one representative surely helped in bringing these increases to pass. Actually, the extent of price increases is only one yardstick by which the Coordinating Committee should be measured . . . its potential and actual contributions on behalf of dairymen include more than price alone.

For years, the rank and file members of dairy cooperatives have been asking, "Why can't all the co-ops pull together?" The NY-NE DCCC is an outgrowth of that sentiment, and it's a vehicle for pulling together the efforts of cooperatives that might otherwise be dissipated in futility. In my opinion, it has done a yeoman job so far . . . because some dedicated and very capable people have worked hard at carrying the load.

What of the future? I predict continued mergers of milk cooperatives, and even closer cooperation among the larger cooperatives that result from such mergers.

All the dairymen shipping milk in federal orders 1, 2, and 15 could fit comfortably into Yankee Stadium at one time. If they want economic power in the society in which we live, they must be prepared to find it through larger organizations embracing broader geographical areas.

PLOWING THE BACK 1040

In an unusual show of unanimity, all major farm organizations appear to be in favor of the principle of removing the advantages of tax-loss farming.

A wealthy investor, whose main income is from some source other than farming, can deduct farming losses from his other income. Strange as it may seem, he can indulge in farming as a hobby . . . be a spendthrift manager . . . and still do better tax-wise than if he were not farming! Besides, he can live on a country estate, and enjoy pleasant surroundings as an attractive by-product of his financial shrewdness.

"Real" farmers who are making a living from their profession claim that tax-loss farming depresses farm commodity prices by uneconomically enlarging the surpluses of food and fiber . . . as well as artificially inflating the cost of land. Of course, the changes in tax laws being proposed might end up making things rougher for some of the white-hat guys, too.

Legitimate farmers might find the limits set too narrowly on how much loss **they** could offset with nonfarm income . . . and many might be forced from a cash to accrual accounting system. Some students of land use also argue that open space has been preserved by the wealthy rural landowner . . . and that he would be discouraged from this function if his feet were really held to the Infernal Revenue fire.

By and large, though, it appears that full-time commercial farmers favor some way of removing the tax-loss farming incentive that has attracted nonfarm capital in excess of what is justified by operating profits.

Farmers need to watch developments closely on this one!

HUMAN NATURE REPEALED

A recent press release from the headquarters of a national farm organization intrigued me. It said, in part:

"It's axiomatic, as well as historic, for producers to increase production when faced with a lower per unit return, as it takes the same dollar volume to maintain their farms and provide their families with a reasonable standard of living."

It seems to me that this comment reflects an abandonment of the idea that prices influence the allocation of production resources among many alternatives. It also seems to do an injustice to farmers . . . implying a blind allegiance to whatever enterprise is being carried on at present, and an inability to develop flexible management.

Further, I'd like to ask why this same farm organization has always called for **higher** prices to stimulate food production for war, and for international food relief. If **lower** prices really stimulate production, then surely governments should seek to **reduce** prices in time of unusual national food needs!

It's one thing to embrace fervently the political belief that only government can "save" agriculture through supply-management . . . but it's quite another to really buy the economic idea that price no longer has any resource-allocating function, or that it has **reversed** its historic function. The former has to do with political convictions; the latter with a concept of reality.

Farmers never seem to be able to find enough employees. Let's see, do you suppose the way to solve the problem would be to **lower** their wages?

FOUR-LETTER WORD

It is fashionable among some theologians to proclaim that "God is dead." It is similarly fashionable for some wisp-beards to announce, "Don't trust anyone over 30." Some feminists trumpet that, "Motherhood is a form of slavery saddled on women."

In an era when some people seek "involvement" and "relevance" by knocking things once valued, it's small wonder we find some "experts" knocking milk and dairy products. Nobody rates a headline by saying the same thing that has been said for years . . . the way to catch attention is to yell a four-letter word! Come to think of it, milk **is** a four-letter word . . . as is **work!**

When all the hue and cry is combined with the testimony of nutritionists and doctors who don't pursue publicity, the evidence points toward dairy products as being excellent foods. Milk contains high quality protein . . . the lack of which is the most serious single nutritional deficiency found in the undernourished of the world (including the U.S.A.).

A friend of mine avoided all dairy products for a time (on the advice of his doctor) to prevent recurrence of a kidney stone . . . only to be warned by another doctor that his bones were seriously deteriorating due to lack of calcium. The second doctor strongly recommended a return to the consumption of dairy products.

Dairymen . . . you've got to combat the influence of anti-milk forces . . . or milk will become to many a four-letter word in the worst sense!

THE DEADLIEST WEAPON

Amidst all the hue and cry about violence in America, a single statistic is almost totally ignored. It is simply this . . . more people die violent deaths, and suffer physical injuries, as a result of automobile accidents than from all "crimes of violence" combined. Two million people each year are mashed, mangled, crushed, smashed, and stomped by other people guiding this deadliest weapon . . . 53,000 fatally. Most incidents are technically accidents, but nearly all were preventable.

Yet no study commissions are named, no students demonstrate, few really tough traffic laws are enacted or enforced, and the drunken driver gets off almost scot-free . . . even if he does kill someone.

We fret about nuclear warfare, yet complacently accept the certainty that more than 500,000 graves will be dug to receive auto accident victims in these United States over the next decade.

What's the solution . . . or isn't there any?

NAVEL WATCHERS

A popular indoor . . . and outdoor . . . sport of some Americans is to weep bitter tears over the supposed "sickness" of our nation. Introspectively contemplating their belly-buttons, they raise wails of anguish over the fact that the people of these United States have not achieved perfection. Some of the most militant of the carpers are absolutists . . . demanding either the immediate saving of the world by their standards, or the annihilation of the whole system.

Human beings never achieve perfection in this world . . . nor do the social organizations they create. The **direction** in which they are moving is the important thing . . . not the level attained at the moment.

The sickness-peddlers are apparently unaware of the sweep of human history that lends perspective to the passions of the moment . . . and they are crushed by the avalanche of information about the evils of the globe. Their ancestors lived in a world abundantly supplied with danger and evil, but instant communications did not overwhelm them with an hourly awareness of the broad dimensions of human tragedy.

The prophets of doom have obviously not rubbed elbows much lately with the productive folks across this great nation of ours. By and large, these folks pay their bills, work constructively, and plan creatively. They too fall occasionally into the mud of human weakness, and betray the best that they know . . . but the comparison of the debits and credits of their days leaves a great residue on the plus side of the human ledger.

You were all tied up and couldn't spray earlier:

It's not too late for AAtrex herbicide.

But you can go in and spray AAtrex™ any time before weeds are 1½ inches high. Because it's perfectly safe to corn at any stage of growth.

The post-emergence spray of AAtrex takes care of most annual broadleaf and grassy weeds which have broken ground. Then, once the herbicide is in the weed root zone, control keeps on working. Lasts right through the season.

Cost? It's not cheap, but one spray of AAtrex can average you about 20 bushels more yield than cultivation and a contact weedkiller. Or a $3 return for each $1 you spend on AAtrex. A mighty profitable investment.

But don't put it off any longer. Order your AAtrex brand of atrazine herbicide now.

Geigy Agricultural Chemicals, Division of Geigy Chemical Corporation, Ardsley, New York 10502.

AAtrex by Geigy

HELP!

by Hugh Cosline

HIRING AND MANAGING help is an important part of management on a big farm. In fact, the lack of need for outside help is one of the advantages of the family farm.

I decided to discuss with and see the "help" angle of farm management through the eyes of a man who operates a large farm and who has had considerable experience. Given the opportunity, I proceeded to overwhelm my friend with a barrage of questions.

"How important is the matter of pay, and how do you arrive at a satisfactory figure?"

"The wage rate is important," was the reply, "but it's not the only consideration . . . and in my opinion, not even the most important.

"Good men can be hired at less than union wages. For one thing, a man is spared the expense and time of travelling five, ten or twenty miles to and from work every day. Then, there are many who prefer to work in the country, and to bring up their youngsters in a rural atmosphere. Another factor is that living costs in the country are somewhat lower."

"We like to feel that the men can talk with us about any problem. But when it comes to wages, we like to keep ahead of them so they won't have to ask for a raise. Of course, wage rates have gone up rapidly in the past ten years, and we think we have kept pace with them.

"The old sequence of hired man, tenant and owner is pretty much out of date. Occasionally an exceptional man will do it, and there is no better way to learn than working on a good farm. But we find a good source of men among the middle-aged farmers who have decided that they don't want to expand their business at their age. They find it preferable to work for good wages.

"Our farm is near a sizable city, which means that jobs in industries are plentiful. This probably means that farm workers here are paid a little more than in a strictly rural area."

"Do you give the men a bonus or a share in the profits?" was the next question.

"I do not look at profit-sharing with favor. For one thing, a worker never wants to share the losses, and he is disappointed if there are no profits to share. We do offer a year-end bonus in the form of a set number of cents per hour for each man, which is decided at the beginning of the year.

"They can draw on it during the year for an emergency, but we encourage the men to hang on to it to the end of the year and to build up a reserve. The plan works well for us. Incidentally, the amount of the bonus varies from man to man."

"Are your men married, and do you furnish houses for them?"

"All are married, and most have children. We have expanded our operation over the year, and the farms we bought naturally had houses. Twenty or more years ago we began to modernize the houses, all of which have furnaces, electric power, running water and bathrooms. In the city these houses would rent for $100 a month.

"We deduct $2 a week from the wages of each man as partial rent. This gives him an interest in his home. Each family owns moveable equipment such as stoves and refrigerators, but if the wives want to have some redecorating or minor changes we furnish the material if the men will do the work. We keep the outsides repaired and painted."

"Do the men take suggestions, or do they resent them?"

"We never correct a man in public," was the reply. "And usually I avoid critical comments right away after a 'goof'. If a mistake is made it has been made and cannot be corrected. So we plan to wait until just before the job is done again and then be sure we give better directions. When a man goes out to spray crops, he has written directions to guide him."

"Are you able to keep the men, or do you have a big turnover?"

"We have one man who has been with us over 20 years. Others have worked here for varying periods. In recent years only one man has left to take a job in industry."

"What about hours of work?"

"The work day on a farm is shorter than it once was, and it's something farm operators must think about. But farming is still a seasonable business, and there are times when it's necessary to put in long hours.

"One thing that helps is to be liberal about time off in slack periods. That evens things out, and of course a good man knows

(Continued on next page)

Treflan®
The mixed vegetable herbicide.

Treflan helps cut the time you spend battling weeds and grasses in over 20 different vegetable crops. You can save as much as 40 hours of hand hoeing and machine cultivation per acre with Treflan weed control. At $1.50 per acre, that alone could mean a saving of $60. Then, there are the better yields that usually follow reduced weed competition.

It all helps add up to better net profits for vegetable growers through more efficient weed control.

Treflan gets the worst types of weeds and grasses —all 27 of 'em—as they germinate. Before they can get above ground and start taking moisture, sunlight and nutrients from your vegetables.

Once Treflan is incorporated into the soil (preplant or postplant), it's there to stay as long as it's needed. Treflan works equally effectively in wet soil or dry. It's a natural for irrigated vegetables because it doesn't wash out, even in repeated irrigations.

You can shallow cultivate, if need be, to break the soil's crust or control resistant weeds without hurting Treflan's weed-killing effectiveness.

Treflan can now be applied by air. Incorporation can now be delayed up to 4 hours after application. For some vegetables, you can apply Treflan weeks before planting to spread out your workload. See your Treflan dealer about the proper time of application —preplant or postplant. It varies according to crop.

Treflan® ELANCO

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So dependable, it's guaranteed.

(Treflan®—trifluralin, Elanco)

DDI MANAGER

George L. Weir, Swarthmore, Pennsylvania, is the manager of Dairy Development, Inc. DDI is a dairy research and development firm formed in 1968 and sponsored by 24 cooperative dairy organizations of the Northeast, representing more than 50,000 milk producers.

Weir was connected with the dairy department of Johnson & Johnson from 1960 to 1967. He joined DDI from Penn Crete Products of Philadelphia, where he had been vice president, sales and marketing, for the past two years. A graduate of Iowa State University, he holds a bachelor of science degree in dairy industry.

The DDI program calls for emphasis on research designed to increase utilization of fluid milk and cream, but it is planned to explore other areas that hold promise of increasing the uses and markets for milk. The new organization has entered into an agreement with the U.S.D.A. to use the Department's laboratory facilities in Washington . . . the U.S.D.A. has similar arrangements in force with a number of other commodity and industry groups as a means of helping to expand markets for farm products and improve farm income.

STERILIZED MILK

In research involving institutions in the East and Midwest, the conclusion has been reached that sterilized milk concentrate will have favorable acceptance by institutional outlets for all their uses — as a beverage, as an ingredient, in food preparation, and as an additive in coffee and cereals.

According to Truman Graf, University of Wisconsin milk marketing specialist, and Robert Cropp, agricultural economist at Wisconsin State University, Platteville, less than 7 percent of the persons served in the East, and less than 3 percent of those served in the Midwest, commented unfavorably about the sterilized milk concentrate.

The personnel sampling the product liked the long shelf life, savings in refrigerator space, and the multiple use, even though the concentrate is more expensive than nonfat dry milk and dry whole milk.

The concentrate will need to be priced at least 1 to 1½ cents per quart equivalent below the price of whole or 2 percent milk to gain a significant level of institutional use in this form. Savings in storage, transportation and distribution can readily make this price possible.

According to Graf and Cropp, the potential sales of sterilized milk concentrate to the institutional markets is estimated at 763 to 795 million pounds of fluid milk-equivalent per year. Institutional use of the concentrate would be about 18 percent of present institutional utilization of whole milk, 2 percent milk, skim milk, and cream.

Help . . . . .

(Continued from page 8)

that you can't farm entirely by the clock."

Editor's Note: It has been suggested that it might pay a farmer, in an emergency, to hire a man who has a job in industry to work by the hour during his off-duty time . . . for example, to drive a tractor. One of the important angles of farm management is to do the job when it **should** be done.

"Do you feel that you and the men are on good, friendly terms?"

"I hope so. We try to have the men feel that they are important parts of the business. We listen to their suggestions, and discuss problems with them. They enjoy the work more . . . and so do we. Every man is entitled to maintain his dignity and self respect."

The comments of my friend are from the point of view of the operator of a large farm producing fruit and vegetables. Some of his comments may not apply to the farm with only one hired man, but most of them are worth thinking about. If you are operating (or expect to operate) a big farm business you will need employees . . . and to "get along" with them.

Some of the suggestions might even be worth considering on a family farm, where teenage boys are beginning to accept more and more responsibility.

Model 469 Haybine® mower-conditioner gives you a big 9'3" cutting width.

A whole new line of mower-conditioners from the people who started it all.

Model 467 cuts a swath 7'3" wide.

Be sure to see New Holland before you make a move!

There are a lot of mower-conditioners on the market today. But if you want the "real thing" . . . the original pull-type mower-conditioner . . . the one-and-only *Haybine* . . . the only place you'll find it is at your New Holland dealer's.

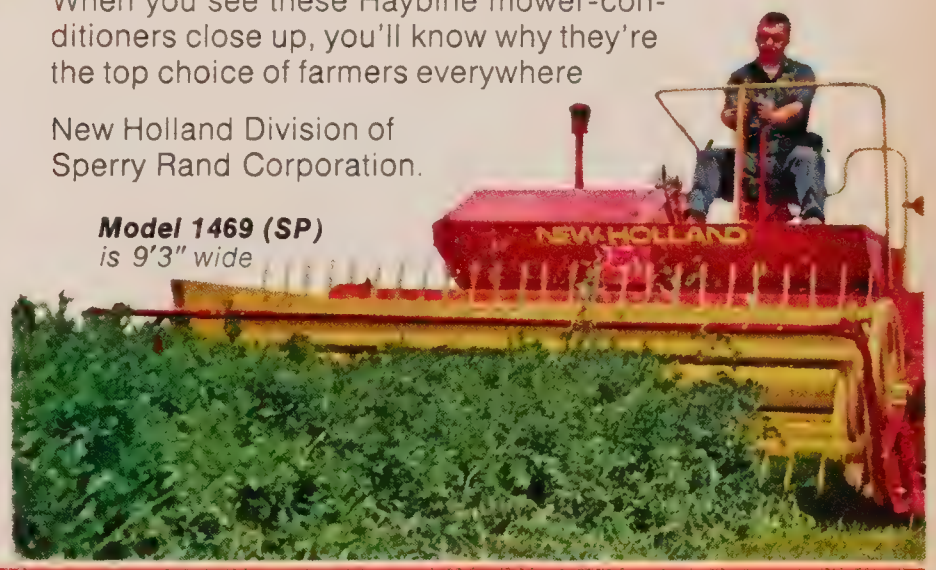
The fact is, he'll show you not one, but three brand-new Haybine mower-conditioners this year: a 7-footer and two 9-footers. There's a size just right for you.

And each is "New Holland" through and through — broad-shouldered and big-muscled to take tough crops in stride:

- The cutterbar cuts at 1,560 strokes per minute, so that it slices cleanly through everything the big reel sweeps in.
- The fast, full-width rolls (both rubber) have spiral design that grips crop firmly, conditions it completely, moves it through swiftly. Result: less buildup, less plugging.
- The strong new drive line is raised high off the ground, up and away from dust and crop.
- The two-way suspension header (on 9-foot models only) lets each end "float" independently to follow terrain closely, cut more crop, reduce damage to cutterbar.

When you see these Haybine mower-conditioners close up, you'll know why they're the top choice of farmers everywhere

New Holland Division of Sperry Rand Corporation.



Model 1469 (SP) is 9'3" wide

SPERRY RAND™

NEW HOLLAND
Practical in design • dependable in action

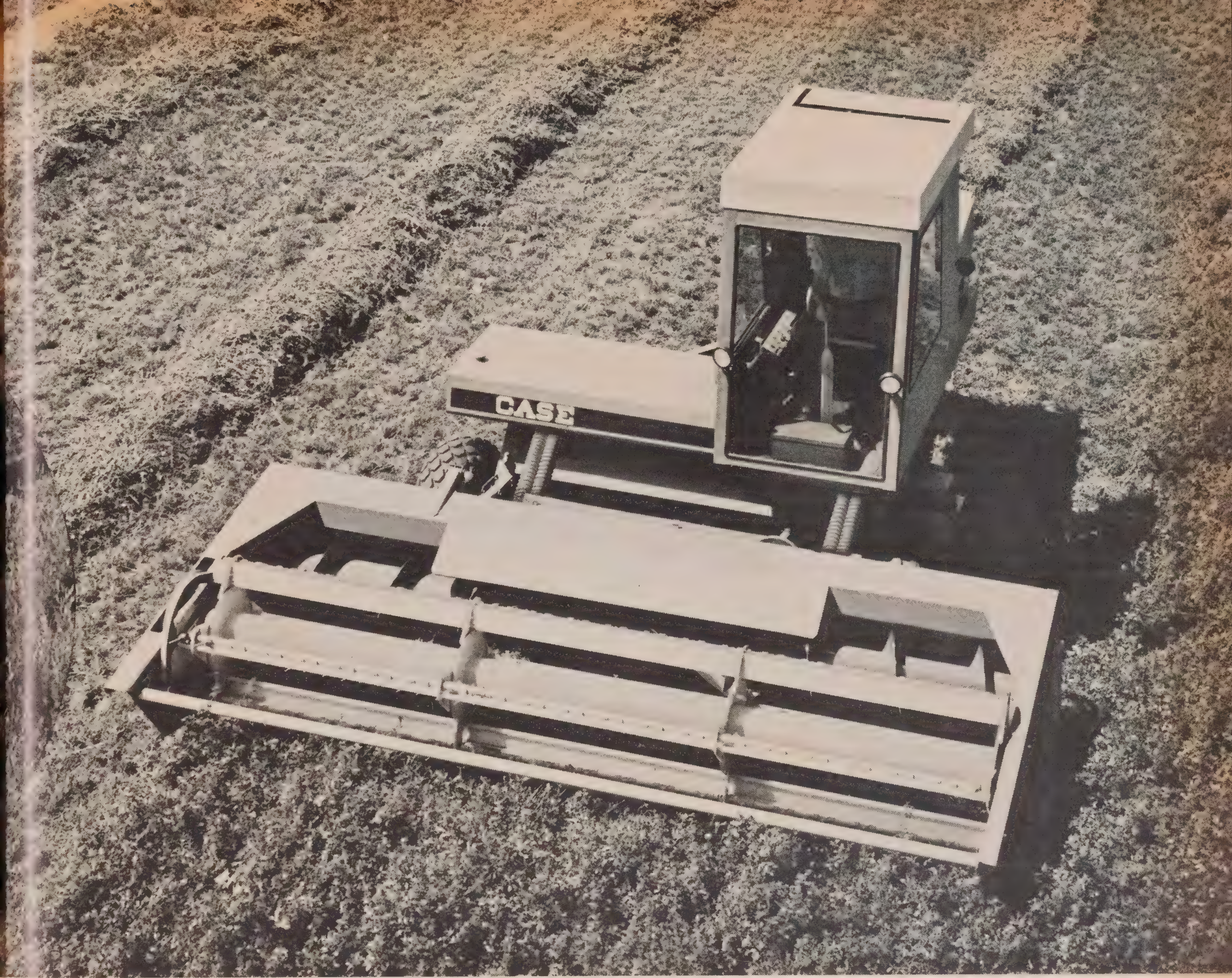
A Case man conserves cash... leases his windrower

Do the economics of windrowing—and its better quality hay—appeal to you? But you'd like to lease one for a season before you buy? See your Case dealer—he's got a Lease Plan that cuts your cash investment. You enjoy Case windrower advantages as you lease—with a very attractive option to buy if you wish. Choose from the longest line of windrowers available—from the 9-foot 555 pull-type to the giant Hydrostatic Drive 1255. J. I. Case Company, Racine, Wis.

9-foot 555 pull-type conditions full-width—speeds up haying—raises hay quality. The extra-wide 110-inch rolls crack every stem for fast, uniform curing—save more protein-rich leaves. Fully-adjustable shields.

"Compact" 655 self-propelled. Cuts with direct feed to full-width conditioner. Trim steering, powerful engine and variable-speed drive give maximum maneuverability—ideal for small, irregular fields—sure-footed control on hilly terrain.

955 multi-crop self-propelled. 10, 12, 14, 16-foot headers, draper feed. Handles heavy alfalfa, birdsfoot trefoil, sudan, timothy—heavy forage crops for silage or haylage—small grains. Rugged, water-cooled high-torque Case tractor engine. Hydraulic-controlled variable-speed drive.



1255 Hydrostatic Drive. Cuts, conditions, windrows up to 100 acres a day. Single lever starts—steers—brakes—stops—reverses. 12 or 14-foot header. 81-inch conditioner. Big 188 cubic inch Case water-cooled tractor engine.

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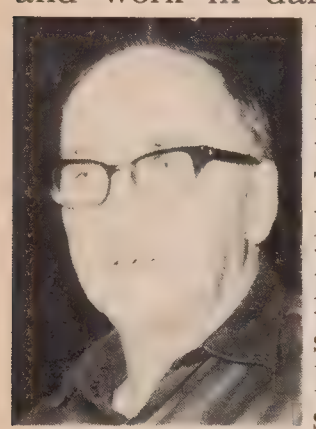
COOPERATION

While Wesley Phillips of Collins, New York, manages a dairy farm with 70 milkers, his interest and work in dairy cooperation takes him away from home for many days in the year. Therefore, he hires more help than most farms of that size. Donald Mellin and his son Donald, Jr. look after the herd while Wesley's away.


Wesley Phillips

"Dairymen have done a good job of marketing milk cooperatively," Wesley said, "but now it's time for cooperatives to do some cooperating."

Back in 1938, the Collins Milk Producers Cooperative Inc. was organized. In 1942, a milk plant in Collins Center was purchased, and was paid for in two years. In 1963 a new and bigger plant was erected, and for years a patronage refund was made to members.

Then in December of 1968 the local co-op stopped operating the plant, and now is managed by OATKA, a cooperative owned by several western New York milk co-ops. One result has been that milk in the area tends to be trucked fewer miles to a plant. The plant at Collins Center makes skim milk powder, whole milk powder, and condensed.

The plant is given health inspections several times a year by U. S. Public Health inspectors, and can market its products over a wide area.

To get back to Mr. Phillips' activities . . . he has served as treasurer of the local co-op, director and vice president of the Niagara Frontier Bargaining Agency, vice president of Milk for Health, and president of the Dairy Council on the Niagara Frontier.

He started farming in 1939, on a rented farm, meanwhile working part-time off the farm to help get organized. In three years he bought 25 cows and in 1942 bought his present farm of 155 acres. At present he rents 50 acres. His son David runs a one-man 40-cow dairy farm which joins the home farm.

A few replacements (5 or 6 a year) are raised, but most are purchased, mostly at private sale. Also, two or three neighbors have raised calves from the Phillips' herd, and Wesley has first choice if he wants to buy them at time of freshening.

All concentrates are bought. Corn is raised on 40 to 45 acres, and hay . . . mostly alfalfa and birdsfoot . . . occupies the balance of the tillable land with the exception of around 10 acres for oats. — *H.L.C.*

WHAT THEY'RE BUILDING

A survey of New York farms by the Agricultural Engineering Department at Cornell University shows these figures for calendar 1968:

(a) 43 conventional-stall dairy barns built, and 200 additions to conventional-stall barns. Of the 43 new barns, 42 were equipped with ventilating fans, 38 with gutter cleaners, and 21 with tie stalls.

(b) 141 new loose-housing systems were built . . . 135 of which were free-stall setups. Only 23 were completely insulated, the rest being "cold barns."

(c) 126 new milking parlors were constructed . . . 108 of them with herringbone stalls. The same number (108) were insulated; 99 have overhead feed storage . . . and 65 were equipped with weigh-jars as a part of the milking system when built.

(d) 847 new silos were recorded . . . 181 of these were horizontal. Of the 666 verticals, 87 were glass-lined steel, 487 were concrete stave, and 74 were wood stave. Of the 847 there were silo unloaders installed in 574 of them.

Forty-seven counties were surveyed, and replies were received from 41 of them. The report of findings was prepared by Professor W.W. Irish, Agricultural Engineering Department, Riley-Robb Hall, Cornell University, Ithaca, New York 14850.

...and yet, some farmers still think of us as just "corn people."

We don't mind being called "corn people." Pickers and spreaders *are* what made us. But still, more than half of our products are for harvesting and handling non-corn crops. And doing these other jobs in New Idea tradition. With the best materials, quality craftsmanship, design excellence, and service that's second to none. Avco New Idea dealers handle a pretty complete line. Try them. The next time you need haymaking equipment.

AVCO NEW IDEA FARM EQUIPMENT

Coldwater, Ohio 45828

"We call her 'Politician' because she runs around with a big bill and does a lot of squawking."

LIVESTOCK

Swine Booklet—A new booklet published by the Livestock Equipment Council is packed with practical information to show swine producers how labor-saving equipment teamed with good management can boost profits. The 20-page booklet has on-the-farm photographs and descriptions as to planning the farrowing house, nursery and finishing buildings, sow confinement, environment control, manure handling, mechanized feeding, water, disease and equipment needs. It also includes charts and floor plans with specifications. For a copy, write the Livestock Equipment Council, 410 North Michigan Avenue, Chicago, Illinois 60611, enclosing 10 cents for mailing charges. Don't forget your zip code.

New Hog Standards—To keep pace with the progress made in producing meat- type hogs, the USDA Consumer and Marketing Service has revised its standards for grades of slaughter barrows and gilts (effective July 1, 1968). A similar revision in the standards for grades of feeder pigs has also just been completed, and became effective March 1, 1969.

The revised standards provide for four numerical grades. The new U.S. No. 1 grade recognizes the superior feeder pigs that are being produced today. Requirements for the No. 2, 3 and 4 grades are similar to those for the former U.S. No 1, 2 and 3 grades.

The standards also contain two lower grades . . . U.S. Utility and Cull . . . for unthrifty feeder pigs that cannot reasonably be expected to reach a desirable market weight in a normal feeding period.

Copies of the standards may be obtained from the Livestock Division, Consumer and Marketing Service, U. S. Department of Agriculture, Washington, D.C. 20250.

No Offense—When researchers at Purdue University working with agricultural research found that new neighbors were complaining about "the pigs next door," they set about trying to find a way to improve the situation. Experiments with various pig housing setups showed conclusively that a septic tank for hog houses makes feasible the mixing of swine farms and suburban housing without objectionable odors and pesky insects.

The house was insulated, ventilated, and equipped with a concrete floor, except for slots at the rear covering a manure pit. Manure collecting in the pit was pumped automatically into a lagoon.

The scientists regard this as a pilot setup. It worked exactly as intended, and didn't have to be cleaned during the summer. But they don't yet know if extending the use of the setup or doubling pig numbers to the scale of a commercial operation would create problems or excessive costs. Follow-up research will clarify these points.

Eating Like A Horse—If your horse is eating nothing but hay and grain this isn't the best thing for him. According to a new booklet prepared for horse owners by Merck & Co., Inc., hay, grain . . . even fresh grass . . . sometimes lack essential nutritional elements. The 8-page, full-color booklet called "How To Improve Your Horse's Diet for Peak Performance," comes with a hang-up stable chart that shows suggested daily rations for horses performing at various levels of activity. For a free copy of the booklet and chart write to 'Top Form' Products, Merck Chemical Division, Rahway, New Jersey 07065, giving the name of the booklet.

Landrace Sheep—A shipment of Finnish Landrace sheep has arrived in the States to be made available to the USDA's Agricultural Research Service. The sheep will go to ARS research stations at Beltsville, Maryland, Clay Center, Nebraska, and Dubois, Idaho for cross breeding experiments designed to raise the lambing rate of domestic sheep. The Landrace typically produces two to four lambs per pregnancy.

Shelter vs. No Shelter—Scientists at Michigan State University feel that housing for beef cattle could be a waste of money. Although in trials housed cattle gained significantly faster and had lower feed cost per pound of gain, the extra grain and feed savings just barely paid for the cost of bedding . . . and didn't cover any of the cost of the housing. The experiments were conducted during the winter and spring . . . in summer, of course, the animals would need some kind of shade.

In 1969, farmers will plant *even more* DEKALB® XLs

here's why

Consistent, top yields have stimulated the greatest seed corn sales in DeKalb's history.

In 1968, DeKalb XLs delivered the top yield—240.1 bushels—in the National Corn Growers Association contest. Plus twelve state winners.

In DeKalb's 200-Bushel Club *measured acre* program, farmers harvested and weighed 48 verified yields of over 200 bushels of No. 2 corn.

Go with the winners. Go with DeKalb XL Corn in 1969. Go see your DeKalb dealer right away.

Go with the big three

XL-45 "The King of Corn." With its single cross twin, XL-45a, it's a top yielder at high populations. Short, tough . . . a consistent performer, year after year.

XL-66 A medium-maturity single cross with sensational yielding ability. Long ears are placed low on strong stalks. Has made 15 to 20 bushels above DeKalb test averages.

640 Excellent high tonnage silage hybrid for the East. Performs well at populations up to 24,000. Uniform, with good ear size for high grain ratio and top T.D.N.

"DEKALB" is a registered brand name. "XL" and numbers designate hybrids.

DEKALB XL POWERPLANTS

Plant DeKalb Corn first, and go all the way with DEKALB

Six of the eight silos where Bill Meal stores high-moisture corn.

CROP GROWER

by Gordon Conklin

A measure of modern farming's mechanization is the fact that William Meal and his wife . . . plus some "moonlighter" help during planting time, and some high school boys handling baled straw . . . operate 1035 crop acres without regular hired help. Their operation near Ludlowville, New York, includes land they own (650 crop acres), and land that is leased. It includes what were once 15 separate farms!

Once Dairy

The Meals were in the dairy business for 22 years, but now lease their two dairy barns (on separate farms) to neighbors. Their cropping enterprise is still closely connected to dairy farming, though, because the grain from the 410 acres of corn they grew in 1968 goes to dairymen. They have such a demand for high-moisture corn that they even buy some corn from neighbors to re-sell.

The sequence of corn-ground preparation goes like this: plowing with a 7-bottom plow, discing once, application of liquid complete fertilizer, disc once over again, plant, and finally the application of a mixture of liquid nitrogen and atrazine (AAtrex) right after planting. Corn planting began on May 11 in '68, finished on May 27. Bill shoots for a plant population in the ground of 30,000 per acre . . . 25,000 per acre at harvest time. The variety M-3 is the major one used here. No cultivation for weed control is done during the growing season.

Twin Hitch

The discing is done with two 9.5-feet discs drawn side by side from a twin hitch. Bill reports that one big disc tends to break up too quickly because of tremendous stress on its long framework . . . and that the two smaller ones last much longer. He plans on using a cultipacker behind the discs this year, to provide a smoother field . . . projecting stones have been a problem at harvestime.

Harvesting in '68 was done with a 3-row head on a combine (planting was done by a 6-row planter in 30-inch rows). Bill is unhappy with the 3-row arrangement, though, reporting that his former 4-row head would harvest seven 10-ton loads per day, but the triple-header only five loads of the same weight. He likes the 30-inch rows, though, and doesn't plan to move back toward his previous 38-inch interval.

Sealed Storage

Harvesting begins when grain-corn moisture is down to 32 percent . . . and it goes into eight sealed-storage 20×30 Harvestore silos, each holding 180 tons. No drying takes place in these airtight structures . . . a good thing, for dairymen generally want moisture toward the upper end of the 25-33 percent range.

Silos are filled with a 54-foot elevator operated by tractor pto. Bill delivers the high-moisture grain, has two trucks (one 11-ton, the other 13.5-ton) for the job. Price is calculated by starting with the price of dried middle-western corn at a local feed company, adjusting for moisture content, and adding a hauling charge to the farm where it's to be delivered.

The moisture adjustment works out to about 47 cents per point above 15 percent . . . that is, 25 percent-moisture corn would be adjusted by around 10×47¢. Bill has his own moisture-tester, but not his own scales.

Weighed

Since he gives weigh slips to each farmer at delivery, Bill has to figure out how to get the load weighed. He comments, "There's nothing more frustrating than to get 50 miles from home with a big load of corn and then be unable to have it weighed . . . weighmaster gone, scales too short or with too small capacity, etc." Over the years, he has learned to plan delivery trips carefully so he doesn't have that problem any more!

Not far behind the corn combine comes a 12.5-feet rotary chopper . . . chomping down stalks so they'll roll under easily when the plow next comes barreling down the field.

Three years in a row is normally as long as continuous corn is allowed here because of potential rootworm problems.

Other crops in '68 included oats (160 acres), wheat (178 acres), and hay. Bill hasn't put down any new seedings in three years, though, because the alfalfa weevil has hit him pretty hard . . . poor hay-harvest weather is a chronic problem . . . and prices for hay haven't been very stimulating lately.

The black-sheep relative of hay crops . . . quackgrass . . . is the biggest weed problem on this farm. Bill tackles it with four pounds of atrazine (AAtrex) per acre . . . either as one application on sod ground, or as a split application on raw ground.

"High-moisture corn," Bill says, "is good deal for me, and for the dairyman. He gets a palatable, high-energy feed at a wholesale price. I'm able to get corn off early, and the sealed storages take the place of drying costs."

GRAIN HANDLING

"Guidelines in Planning Grain Conditioning and Storage Systems" is a twenty-four page manual written to assist grain farmers and cattle feeders in the planning of an automated grain or feed handling center. Detailed information includes guidelines in organizing a grain system, investment and management tips, methods of utilizing existing systems, and selecting new equipment. A "Cardinal Errors" check list helps avoid future problems in operation and expansion.

A full page is also devoted to hints on financing.

Manuals are available for 25 cents per copy, to cover cost of mailing and handling, from Behlen Manufacturing Company, Box 569, Columbus, Nebraska 68601.

WIDE CROSS

Plant scientists are working to open up new possibilities for food production by crossing distant relatives . . . wheat and rye to produce Triticale, for instance . . . or even "wider" crosses than that. Fifteen plant scientists recently met to discuss this particular aspect of plant development, as guests of the Rockefeller Foundation at New York City.

A number of entirely new crops may be on the way from this kind of hybridization.

Left to right: DeKalb researcher Gary Beil, James Place (Smithfield Farms), Dirck Coon (Coon Bros. Farm), William Johnson (Larch Meadow Farm), and DeKalb dealer Gordon Denegar of Red Hook, New York.

TOP CORN GROWERS

DeKalb AgResearch, Inc. reports top corn growers in company-sponsored yield contests as follows (yields are bushels of #2 shelled corn at 15 percent moisture):

Western New York: Melvin and Fred Olmstead, Holcomb, 183 bushels; Selden Stokoe & Sons, Scottsville, 178; Basil and Milo Gillam, Clifton Springs, 159; Ted and James Minns, Geneva, 151; Lee Roberts, Medina, 149.

Dates planted varied from May 6 to May 14 . . . and plant population per acre at harvest from 21,500 (Stokoe) to 27,000 (Olmstead and Roberts). Three growers planted in 30-inch rows . . . two in 32-inch rows.

Eastern New York and New England: Coon Bros., Amenia, 169; Dutchfield Farms, Amenia, 165; Smithfield Farm, Amenia, 153; Larch Meadow Farm, Lakeville, Conn., 146; and Lincoln Russell, Little Falls, 135.

Dates planted here ranged from April 28 (Smithfield Farms) to May 18 (Russell) . . . and harvest populations from 22,400 (Dutchfield Farms) to 32,000 (Coon Bros.). Row widths included two at 30 inches, one each at 32, 36, and 38-inch intervals. The top yield at Coon Bros. was planted in rows with 36-inch intervals.

Smithfield Farms had a test yield of 23 tons per acre of corn silage. Grain yields are computed from 1 acre of machine-harvested land.

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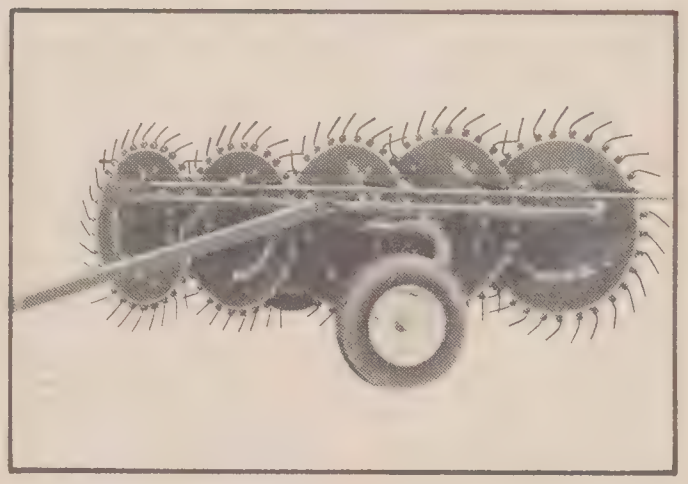

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Gayway Farm Notes

by HAROLD HAWLEY

ALL CORN

Recently we had the opportunity to be in on a discussion relative to feeding all corn (as silage) to dairy cows vs. a corn silage and hay or haylage roughage program. The basic reasons for the difference of opinion seemed to be a failure on the part of some of the participants to recognize that every farm is different, and the best program for it may be dissimiliar to that most useful for his neighbor just because their farms are different.

We hear much of the success of all-corn silage roughage programs on some Connecticut River Valley farms. No one doubts that corn silage as the sole roughage will cause cows to milk assuming proper protein supplementing. What we need to search for is the best system for each of us. If we have relatively less-expensive land and plenty of it, there is mighty little argument in favor of feeding just corn silage and buying all the protein that will be needed. Rather than do that, feeding some hay or haylage as the second roughage will save buying so much protein, spread labor requirements, and will, of course, enable the land to be kept partly in sod. This latter can mean much in terms of organic matter, soil compaction, and erosion control.

Critical Question

What is really the critical question to be answered is, what combination of roughage or roughages and protein and grain results in the lowest cost for producing milk? It's not of interest to us on our relatively-low-priced land that we could produce the most total nutrients per acre with corn silage. What does appeal to us is that we can produce milk for less by using two roughages. In our set-up, we can also feed a lot of high-moisture corn to meet some of the needs. The addition of urea to the corn silage steps up the protein content a little. The cash cost for protein supplement can be kept pretty moderate with the combination and, if hay yields are high, the total cost of roughage can be kept at a level which allows for a decent profit margin.

It seems more and more apparent that fertilizer inputs on alfalfa on a level comparable to those applied to corn will raise yields enough to make a good haylage program pretty much competitive with corn silage when all costs are figured. If a good seeding is properly fed, is cut three times, and lasts three years, it will take some mighty good corn crops to produce cheaper milk. We like the idea of one seed cost being spread over three years, as well as one seed bed preparation doing for three years. Weed control costs are less with hay than with corn.

The worst disadvantage that we experience with hay crops are the weevil control costs and the extra harvesting costs (three times over the ground with both the windrower and the chopper).

We have no axe to grind. Our only gripe is that it seems as though in the enthusiasm some have for an all-corn silage program, they may not be properly evaluating some of the merits of haylage as an accompanying roughage on many farms.

REPLACEMENTS

After nearly four years of buying replacements in addition to what we could raise, we've about decided that it can be a pretty good deal. So far, there have been a minimum of disappointments or problems with purchased animals.

We have been fortunate to be able to buy most of our heifers from local sources. In fact, we have bought from dairymen who were tapering off by raising some young stock. These were well-raised animals. The risk from disease has been non-existent as the heifers don't go through any sales ring or sales barn. We recognize most sales places are pretty well run, but we feel a little safer not buying there.

We have the same feeling about hauling cattle home in just any old truck. We feel more secure if the truck is clean and disinfected, and if the hauler is quiet and gentle with the animals. We have been lucky to find such a man.

We've pretty well established that we should get replacements here about 3 weeks before calving if we are to have good results. It takes a while to get an animal really adjusted to a new environment and to new types of roughage.

Raise Own

Hopefully, we can raise most of our own replacements from now on. We feel it is more satisfactory for us to buy any extra replacements than to have someone raise them for us on a contract. We want to be able to select a little when we do buy, and not feel that we must take whatever is raised whether it looks good or not.

You may ask if we don't run into the problem of "accepting" whatever comes when we raise our own. Yes, and sometimes an individual doesn't look quite as good as we would like. We've got all over the notion that we will keep her for a while and see if she doesn't do better than she looks. Sometimes they do perk up and improve, but generally speaking we think if they don't look the part before they freshen we are money ahead to unload them at that time. Poor feet and legs or poor udders just don't improve, so we eliminate them before they freshen. It's been quite a switch from the days when we kept all purebred cattle and felt we should give each heifer we raised a chance just because she was out of a good cow family. Better she should make it on her own regardless of her breeding.

FIRESIDE LUXURY

As we get more and more organized . . . no, as we have more and more organizations, it becomes more and more difficult to find nights on which we can stay home and enjoy the domestic comforts. It becomes, as in all things, a matter of settling priorities and eliminating those meetings which aren't worth the effort. I make the suggestion that there is one meeting a year no farmer can afford to miss.

I refer to the annual school meeting. This has always been important, but has now assumed new significance. School taxes have become a major cost item for farmers and will become much larger. As I write this, it is too early to know how much state aid for educational purposes will be reduced, but it will be a significant amount. Personally, I am in favor of slowing this always-upward trend.

This doesn't mean I'm against better education, etc., etc. It does mean that we have come to the point of setting some priorities. If we want the schools to do everything for everybody we better expect to pay for them. If we think some things ought to be done and others eliminated we had better be willing to be counted on the issues. By this I mean, are we willing to continue paying for adult education, driver education, and almost unlimited after-school bussing of athletes? Do we believe it is part of the school's responsibility to provide dental hygienists, psychologists, and other non-classroom personnel? Is it really good business to provide more and more teacher aides to relieve teachers who are being paid more and more to teach ever smaller classes?

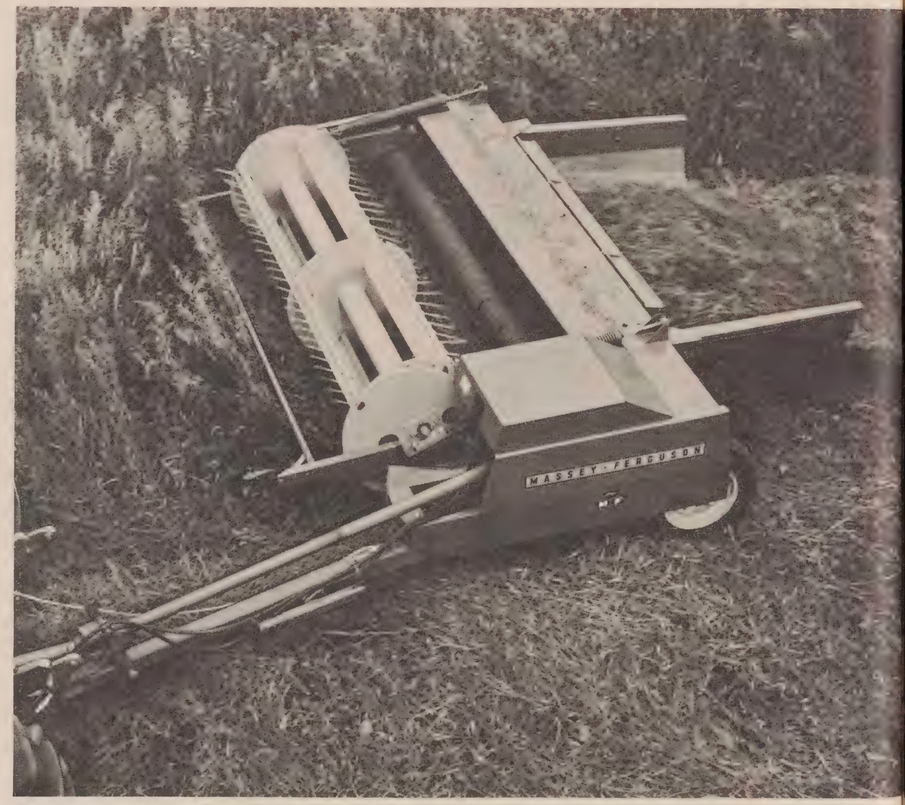
Many, many people who complain about their taxes might do well to come to annual school board meetings and express their opinions on these matters. It's well and good to blame the State legislature, the State education department, the school administration and the school board for things they don't like, but really each and every taxpayer could have something to say on these issues and expenditures which become part of the tax structure.

Significant

This year could be significant in terms of school costs and attitudes toward the same as a larger share of the costs will be borne by local districts. Possibly as taxes become more burdensome people will assume more responsibility in directing their school boards as to what they want their school to do and what they feel their schools should not do. It's been a common attitude that nothing can be done about school costs. Nothing is further from the truth. Schools can be run for less, much less, if we decide what things we can do without.

I doubt that our school district is different from most others. Everyone moans about the taxes, yet in eight years on the school board I have yet to witness any activity on the part of the people of the district to urge their board to do this or that. Running the school is the biggest government activity in any of these central school districts. With teachers' associations and state education people proposing things to the legislators on the one hand and the general public doing almost nothing on the other hand, school boards have fought a losing battle on costs for years.

Everything you need but the barn.



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The MF 81 and MF 12 are only two machines in one of the most complete hay tool lines in the business. Chances are, they're just what you need. Go and see them at your MF Dealer today.

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Single power band belt drive on HESSTON PT-10 puts an end to chain noise and problems!

Some pull-type windrowers have complicated drives that require three, four or even five chains. Hesston put an end to the chain gang with a single power band belt that powers the hay conditioner, reel and sickle. You can tell it's more efficient and dependable because it's so quiet...and less noise means less wear. The Hesston PT-10 has still another quiet advantage...an internal eccentric spider that regulates the folding tines on the reel. No noisy exterior cam, so there's less maintenance, still more dependability. With all its other quiet signs of quality, the Hesston PT-10 is a big performer. It takes a 9'3" cut, feeds the hay directly into a full-width conditioner and leaves it in a tunneled, fast-curing windrow or a 7-foot swath to suit your humidity conditions. Ground-hugging flotation let's you cut all the crop in the roughest areas. A sure winner in any showdown with the chain gang.

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Dates to Remember

May 1 - 2nd Annual New York State Calf Sale sponsored by New York Holstein-Friesian Association, former Cortland County Fair Grounds, Cortland, N.Y.

May 3 - New Jersey Hereford Association Annual Spring Sale of Feeder Calf and Commercial Beef Cattle, Cooperative Livestock Market, Hackettstown, N.J.

May 3-4 - Delaware Valley College "A" Day, Doylestown, Pa.

May 4 - New York State Dairy Goat Breeders Association Annual Meeting, Delmonte County Manor, Cleveland, N.Y.

May 6-7 - Waste Management and Disposal Conference for the Food Processing Industry, Pennsylvania State University, University Park, Pa.

May 11-18 - Soil Stewardship Week.

May 17 - New England Angus Association Spring Sale and Show, University of Vermont Arena, Spear Street, Burlington, Vt.

May 18 - Buck Show sponsored by New York State Dairy Goat Breeders Association, Fair Grounds, Schaghticoke, N.Y.

May 23-25 - Vermont-New York Flying Farmer Convention, Hotel Bardwell, Rutland, Vt.

May 25-28 - American International Charolais Assoc. Annual Meeting and 2nd Annual North America Charolais Classic, Ohio Exhibition Center, Columbus, Ohio.

May 27-28 - American Feed Manufacturers Association Annual Meeting, Municipal Auditorium, Kansas City, Mo.

June 9-10 - Second Farriers' Short Course, University of Connecticut, Storrs, Conn.

June 11-12 - 84th Annual Meeting Holstein-Friesian Association of America, Disneyland, Anaheim, Cal.

June 15-19 - 38th Neppco Egg Quality School, Rutgers State University, New Brunswick, N.J.

June 19-21 - 22nd Annual Delmarva Chicken Festival and National Chicken Cooking Contest, Seaford, Del.

June 21 - First Annual New Jersey Blueberry Festival, Smithville Inn, Smithville, N.J.

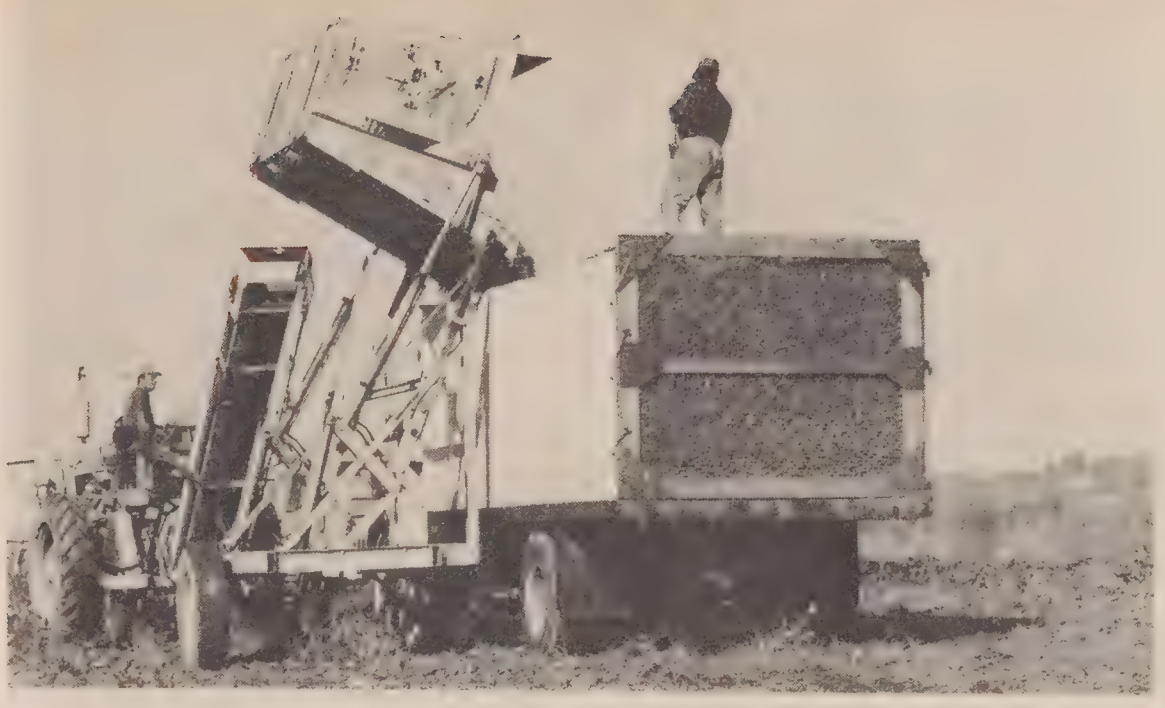
June 24-25 - Poultrymen's Get-Together, Morrison Hall Auditorium, Cornell University, Ithaca, N.Y.

June 25-27 - American Poultry Congress, Exhibition Center, The Sherman House, Chicago, Ill.

June 26-27 - American Summer Tour, Pennsylvania Horticultural Association, sponsored by Berks Co. Fruit Growers Association and Lehigh Valley Fruit Growers Association.

June 28-July 1 - 34th Annual Meeting, National Apple Industry, Claridge Hotel, Atlantic City, N.J.

"I don't know how it happened," the stewardess said, "but we seem to have left your wife behind in Chicago."
"Thank heaven," the husband said. "I thought I had gone deaf."



Harvester unit with self-unloading bin drops beans into truck

FROM MIGRANT TO MAGNATE

by Gordon Conklin

IT'S likely that Fritz Wafler of Wolcott, New York, would object to that word "magnate" in the title, but it's an undeniable fact that he has come a long way since his days as a migrant farm laborer. Born in Switzerland, he came to Canada in 1952, then to the U.S. in 1956. For six years, he picked fruit, worked in tobacco fields, thinned sugar beets, and did general farm work.

Finally settling on a farm just east of the hamlet of North Huron in Wayne County, he now operates farms with 30 acres of bearing apples, 100 acres of non-bearing apples and peaches, and 700 acres of snap beans.

Most Contracted

Fritz contracted beans to three different processors in 1968, and held 100 acres "open market" for sale anywhere. "Give-and-take between farmer and processor is essential to a mutually-satisfactory arrangement," he comments.

Bean seed first rattled down the four-row planter shoes in 1968 at the middle of May, ended on the 20th of July. Previously, land had been turned by a roll-over four-bottom plow (no dead furrows), often with a clod-buster attached. Land is then disced or culti-mulched, but Fritz "makes it a point to work soil no more than we have to."

At one time, he used rye and ryegrass as cover crops, but now plants oats (3 bu./acre) and wheat in the fall for this purpose . . . and a limited acreage of ryegrass. Oats winter-kill, and wheat doesn't grow as fast in the spring as the other cover crops . . . providing more tillage flexibility in the rush-rush spring season.

Fertilizer

Fertilization generally consists of 250-400 pounds per acre of 8-24-8 dry fertilizer . . . all applied through the planter. The supplier loans Fritz a bulk fertilizer tank that sits on a farm truck and augers the plant food into the planter hoppers. Fritz likes a small bean vine . . . because of the danger of white mold and tip rot if vines are large . . . and tries to adjust fertilization to achieve this objective.

Varieties make up a sizable list, including Kinghorn Wax, Early Wax, Cascade, Tendercrop, Slimgreen, Green Isle, Slenderwhite, and Tenderette . . . plus a few new experimental varieties each year. Fritz is keenly aware of the problem of seed damage . . . so acute to beans . . . and moves his bagged seed on pallets so it isn't tossed around.

Herbicide

Just before the bean seedlings raise their heads through the soil, premerge herbicide is applied. Most fields get one cultivation; a few are cultivated twice. Row interval is 36 inches . . . Fritz would go to narrower rows because of potential increase in yields, but his harvesters are set up for 36-inch spacing. Rows are run up and down hills, by the way, to prevent equipment side-draft problems that would make harvest difficult on across-slope rows.

There are three mechanical snap bean harvesters here, one equipped with a hydraulic bulk bin . . . the others discharging into pallet boxes. There are also three farm trucks for hauling beans to processors. Fritz normally has two year-round employees to keep things rolling . . . plus five more seasonal employees in the summer.

Two-way radios in four trucks, one car, and at the Wafler residence help correlate activities. Mrs. Wafler is chief dispatcher for the radio hookup . . . as well as farm bookkeeper, general errand runner, and homemaker.

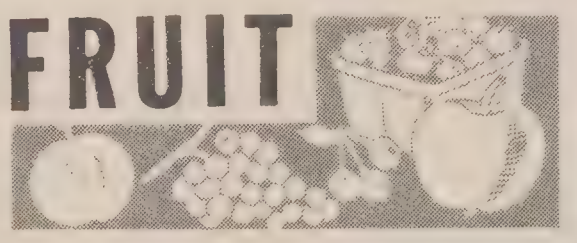
An apple tree nursery business is a sizable-volume "sideline" here. Fritz reports that MM 106 and MM 111 appear to be the most popular semi-dwarfing rootstocks at the moment. He has one of the most complete assortment of clonal apple rootstocks and interstocks in his orchards . . . including at least 12 separate types.

As he evaluates some of these rootstocks, Fritz reports that under his conditions, "EM IX and 26 don't stand well, but dwarf well . . . and EM 26 appears less winter-hardy than MM 106."

His judgment is respected in community affairs as well as in farming techniques . . . Fritz is a member of the North Rose-Wolcott Central School Board of Education, and also serves on the Planning Board of the Town of Huron.

As he reflects on the limited opportunities offered by the home farm in Switzerland, and on his years as an itinerant farm laborer, he concludes, "America has its problems, but it remains a land of opportunity."

FRUIT



Frost Stopper – Dr. Harry J. Braud, Jr., professor in the department of agricultural engineering at Louisiana State University, has formulated a foam which combats frost damage to fruits and vegetables. The new foam, which can be made to last all one night or for several days, represents a major breakthrough.

It is felt that the discovery could mean the saving of millions of dollars for the citrus industry and in other areas, too. For example, when the foam was applied to strawberry plants, a difference of 21 degrees between protected and exposed plants was maintained over two nights. The University feels that the inexpensive, light-weight foam holds particular promise also for tomatoes, sweet peppers, potatoes, and sugar cane, which frequently suffer spring freezes . . . and can be used to make sure cold snaps don't destroy blossoming flowers of ornamentals.

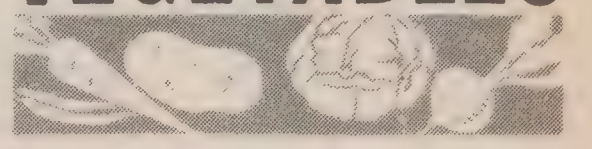
A field operation involves a tank, generator, and tractor-powered compressor on a platform behind the tractor. The foam is ejected from two nozzles under the vehicle, and extension bars can be adapted on each side to make possible a multi-row operation.

Strawberry Course—Pennsylvania State University has a correspondence course about strawberries and other small fruits which could prove helpful to anyone contemplating growing them in their gardens.

Strawberries, in particular, take less time from planting, and a total crop failure is rare. Improved varieties easily adapt to a wide range of soil types and produce fruit without great care. In vitamin C content, strawberries are second only to citrus fruits.

If interested, send your name and address to Small Fruits, Box 5000, University Park, Pa. 16802, with check for $3.85. Make checks or money orders payable to The Pennsylvania State University.

VEGETABLES



Mechanical Cabbage – Several mechanical cabbage harvesters have been demonstrated in the Northeast; among them are ones made by:

1. William Wadsworth, Clyde Welding Service, RFD 2, Clyde, Ohio 43410. One or two-row models are available for 1969. Donald Bartelson, Sodus, New York, used a one-row unit in 1968.
2. Emmanuel Boyer, RFD 2, Albion, New York 14411. Units of a previous model have been used in Illinois and Wisconsin.
3. Robert Wright, RFD 1, Clyde, Ohio 43410 developed the Lowe Harvester . . . now sold by the Lowe Machine Company, Oak Harbor, Ohio 43449.
4. Clifford Kunes, Jr., of Seneca Castle, New York 14547 built a one-row self-propelled harvester for his own use in 1968.

White Mold – A material known as Benlate (DuPont 1991) has provided good control of white and gray mold in snap beans. Applied just before or at full bloom, it protects the blossom from infection, and effectively eliminates the major source of inoculum for the spread of mold organisms. Apparently, the blossom is the key to mold prevention.

Professor J.J. Natti of the New York Agricultural Experiment Station at Geneva, in making the preceding report, also indicated that "1991" is not labeled for use on snap beans. His guess is it won't be until the 1971 growing season!

"Lord's Acre"—When the youth groups in Batavia, New York, attended Easter Sunrise services in 1968 on the site of a new church, they determined to do something to help toward building the new church. Land was made available by Mr. and Mrs. Robert V. Call, Jr., and planted to squash.

When harvest time came the project had become quite ecumenical . . . about 100 from different denominations shared in the operation. And from the 12 acres of squash some 220 tons were harvested and sold to baby food canneries. This brought $1,864.80 to the young folks, who promptly donated it to the building fund for the church.

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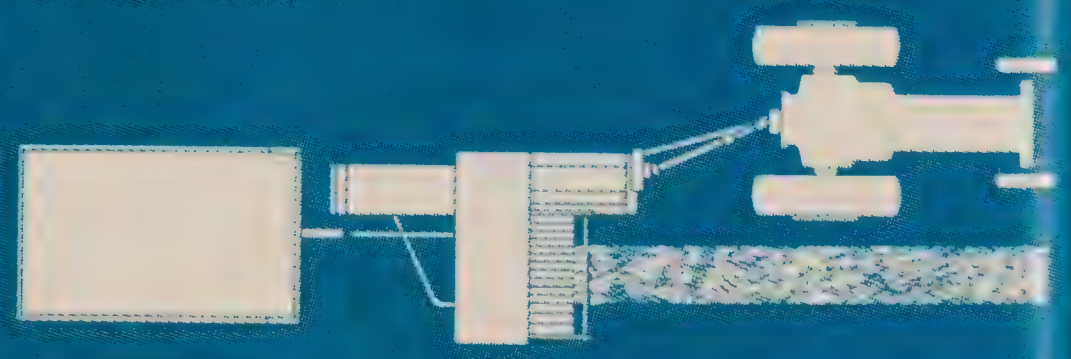
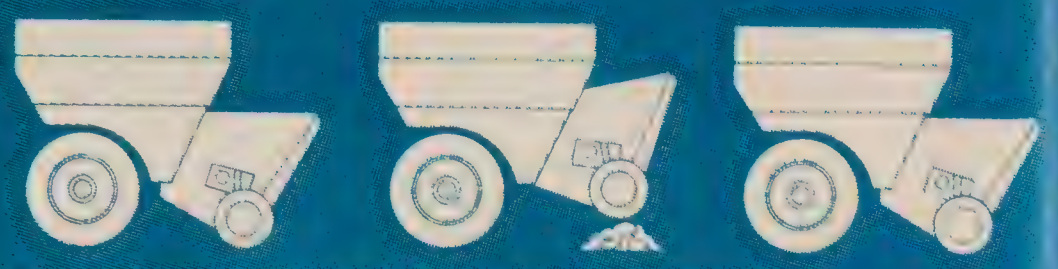
IN THE FIELD.



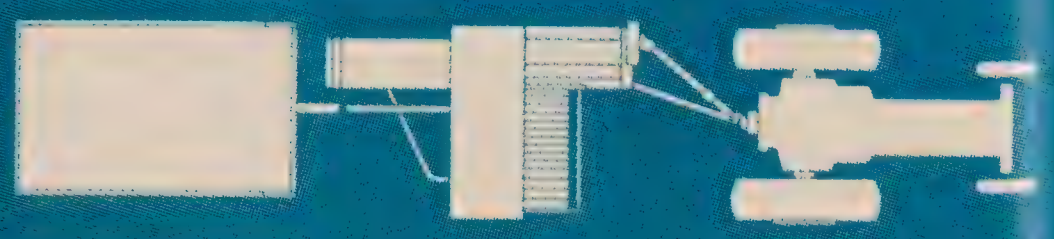
1. Activate *SwingLift*.
   - Baler moves in-line with windrow.
   - Pickup lowers to desired height
2. Engage tractor PTO.
3. You stay on the go—don't stop!

IN THE FIELD.



1. Field obstructions or irrigation borders or ditches . . . raise and lower pickup by activating *SwingLift*.
2. You stay on the go!

GOING HOME.



1. Activate *SwingLift*.
   - Pickup raises to full height.
   - Baler moves in-line behind tractor.
2. Disengage tractor PTO.
3. You stay on the go!

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A BERRY-PICKING GLOVE

by George S. Edmonds

NECESSITY is the mother of invention. When my right hand was partially crippled by an accident and I lost one finger, I could no longer pick berries with it because they rolled out through the gap in the fingers. So, to compensate for this, I made a berry-picking glove with a pocket on it, and found that I could pick more berries . . . and much faster than I ever had before. If you have a berry patch, or if you like to pick wild berries, as most rural people do, you should have such a glove. Here is how you make one:

Take a white canvas glove and cut off the thumb and first two fingers . . . either right or left depending which hand you pick with. Make a round cloth bag six inches in diameter, and of about three pints capacity, with a narrow hem on the top. Push a piece of thin, spring steel or stiff wire (I use a corset spring) through the hem. Sew the bag halfway around on the under side of the glove and little finger so the mouth of the bag is held open.

Now you can hold the bush with the free hand and just rattle the berries into the bag with the other. You can also pick much faster with the off free hand because it is so handy to drop them into the bag. A finger loop on the bottom of the bag is a help in emptying it.

This picking glove is of little use for low-growing berries such as strawberries, low bush cranberries, etc., but for blueberries, blackberries, raspberries, cherries, grapes, and the like it is a great time-saver, and a lot of pleasure to use.

HELP AVAILABLE

Each student enrolled in the agricultural program at John Bowne High School, Flushing, New York, is required to work three full summers on a farm or related agricultural establishment. Few of the girls plan to become farmers, but all of them realize the importance of learning the routine jobs and skills necessary for the growing of crops and the management of livestock.

The present training facilities at the school include a four-acre land laboratory and agricultural mechanics shop where the students receive introductory and basic instruction in practicing safety, tractor operation and maintenance, and the skills relating to poultry, fruit, nursery, and vegetable crop production. Some of them have previous farm experience.

If you are interested in employing one or more of these girls (who are between 15 and 17 years of age) write for further particulars to Mr. George Chrein, John Bowne High School, 63-25 Main Street, Flushing, New York 11367, or call Mr. Chrein at 212-263-1919, Extension 24.

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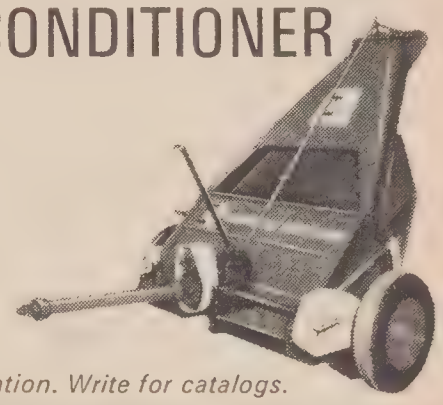

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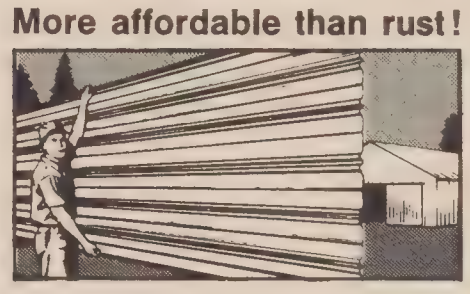

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MORE APPLES

In 1957, I bought a farm adjoining my home farm, on which was a 5000-bushel cold storage. We started retailing from this in a small way the first winter. Volume increased gradually without much effort, but we had calls to deliver some if we could, because "my husband works in Rochester and can't get out to your farms during the day." This we did when we were going to Albion for parts, or happened to be that way. My youngest son, then in high school, would catch up on Saturday anything we had not taken care of during the week.

Then he went to college. By this time we decided we would have to quit delivery, or put it on a business-organized basis. Three years ago we bought an Econoline Van, painted it red and white, with a big red apple on each door. On each side we advertised "Silver Creek Farms—Don Nesbitt Apples Crisp and Juicy from our Farm Cold Storage." We keep this clean and bright, and it is a real good moving billboard.

Advertised

Then we advertised varieties available, and free delivery on one day every week in their town. All they had to do was phone us their order. We deliver in the Medina area on Wednesday, Holley and Albion area on Thursday, and Brockport on Friday. The urban population involved is about 20,000, with another 5,000 in the rural areas.

Our pricing policy is about as follows, with an exchange basket for bushel sales, and half bushel and pecks going in our bags printed with our name, address, and phone number on the side. If bushels are priced at $4.50, half bushels are half the price plus 25 cents or $2.50. Pecks are half that price, plus 25 cents or $1.50. This applies whether delivered or at the storage.

We thought this would eliminate sales at the storage pretty much, since people wouldn't drive the 5 to 15 miles from these towns to our storage if we would deliver free. We were quite surprised when our storage sales doubled over the previous year. This has happened each of the past three years.

Our total volume this year has averaged $1100 to $1200 per week, with about 25 percent of this being delivered. We grow apples primarily for processing, and this retail volume is only about 10 to 15 percent of our bushels, but this year will be about 25 percent of our dollar volume.

Reasons

I have been interested in doing this for several reasons:

1. Our customers get more for their money. While the vast majority of the apple volume will be packed and moved through stores the way it does now, I find that people are concerned about paying 15 to 35 cents per pound for apples in the store. Buying from us they pay 8 to 15 cents per pound.

2. Apple flavor, crispness, and juiciness is better. You can't beat an apple that you start eating the same day it came out of storage!

3. Apple consumption needs to be increased, and this is one way of doing it. Many of my customers tell me they are using a peck to a half-bushel a week, when previously they only occasionally picked up a three-pound bay at the store. Another comment, "I never knew apples could taste so good!"

4. We are getting more net money for our apples sold this way. The container cost is reduced . . . or there is none with exchange baskets . . . and we have added no facility overhead other than the van. Our service per pound or unit is much cheaper, because each of our sales is a peck on up to 5 bushels . . . yes, we frequently have orders for two or three bushels. This compares with a three-to-five-pound unit sale in a store.

We also send gift boxes for customers, and much of this volume goes to people who just wouldn't be eating apples. This year we have sent apples to Alaska, Guam, Vietnam, Canada, and almost every state in the United States.

All in all, I guess the biggest pleasure in selling apples this way, other than getting more money for them, is the enthusiasm our customers show when they come back for more.—*Donald Nesbitt, Sr., Albion, N.Y.*

NEW BARN

Robert Everingham of Lafayette NewYork, has transferred his herd from a conventional stable to a new 212′ × 50′ free-stall setup. It has 102 stalls . . . a double-4 herringbone milking parlor . . . two bulk tanks (a 600-gallon, and a 500-gallon) . . . and a liquid manure tank that holds 120,000 gallons.

Water from the parlor and milkhouse go into the tank located under the new barn, except for that used to wash the floor of the milking pit. The tank is emptied every 6 to 8 weeks with a 1400-gallon spreader having airplane (20-ply) tires for greater ground flotation. Both ends of the barn slope toward the openings above the manure tank, located near the center of the barn.

Unusual

Unusual features here are the two manure loading "helps" located in both corners of one end of the barn . . . consisting of concrete right-angles 8 feet long on each leg, and 4 feet high. Frozen manure must not be pushed into the tank (it will *never* thaw there); during cold weather, the floors are scraped and loaded by front-end tractor loader into a conventional manure spreader. The concrete corners facilitate this process by "cornering" the manure!

Robert Everingham (left) visits with dairyman Raymond Aungier of nearby Tully, New York, about liquid protein supplement in tank at left. Cows lick wheel, thereby turning it to bring up more material.

This barn has 4 rows of free stalls on one end, two feed bunks at the other . . . each 60 feet long and 4 feet (inside dimension) wide. Roughage fed is ⅔ corn silage and ⅓ haylage . . . no dry hay. Bob reports no butterfat depression on the all-silage ration. Presently, silage is stored in a 24×60 and 20×50 upright silos, with another 24×60 to be built this summer. Plans call for 175 acres of corn in 1969.

Urea Fed

Urea (10 lbs. per ton) is added to corn silage at ensiling time . . . and Agway's Liquid Protein Supplement ("LPS") is available on a free-choice basis from tanks at one end of the two feed bunks. Cows are eating an average of 3 pounds per cow per day of the 33-percent-protein LPS, which is a mixture of molasses, urea, vitamins, and minerals.

High-moisture shelled corn is stored in a 14×50 concrete-stave silo (after going through a burr mill), and is being fed at the rate of 12 to 14 pounds per cow per day. In the parlor, each cow gets from 0 to 8 pounds of grain . . . depending on production.

Features

Other features of this setup:

1. Heat cables are buried in parlor curbs next to pit, and in doorways where ice could build up. Electric quartz heaters are positioned to warm the operator, and keep pit walls dry.

2. Feeder switches nearly automate parlor grain feeding . . . and there is a "dribble" option that puts in just enough feed to keep a cow occupied, even after she's cleaned up all the grain she's entitled to by her production. There is a separate switch for each of parlor's eight stalls.

3. A combination neckboard and catwalk is atop the two middle rows of free stalls.

4. A chain gate . . . held taut by a load-tightener . . . can be used to separate the barn into two sections, and forms one "wall" of the holding area. An electrically-charged squeeze gate is controlled from the parlor, "encourages" cows to move into the parlor from holding area.

5. An electrified wire down the center of feed bunks prevents cows from using them for a dormitory.

6. A unique swinging gate at the end of the barn . . . welded up by the Everinghams . . . with simple catches, but rugged enough to hold big Holsteins.

7. Curbs at base of bunk feeders are sloped at each end so one wheel of a self-unloading wagon could be run along on top of curbs, if desired.

The main reason for the change in barns is summed up by Bob when he says, "Labor requirements were reduced by ⅓ in the new barn." The name of the game is more production per man!—GLC

CONCRETE SILOS

Andrew Spencer of Arkport, New York, raised 200 acres of corn in 1968 (250 planned in '69). He stores corn silage in two concrete bunker silos, plus two upright silos (14′ ×50′ and 20′ ×50′).

Andy Spencer

The first step in building the horizontal silos was to excavate, then pour a concrete floor. The walls were poured on the floor in panels 8′×10′ wide and raised for sides. The silos are 36′×100′ and 8′ deep.

The first silo was built entirely by Andy and farm help plus a neighbor with his farm tractor loader to help tilt up the walls. On the next one a crane was hired to tilt up the walls, which have an outward slant of 2 feet from the vertical.

"I'm planning to build another one this summer," said Andy. "I'm not sure just how big to make it. We may make it narrower, because I think it might work better for haylage."

Obviously, it takes a lot of livestock to eat all that silage. Andy is milking around 130 cows, and is also raising around 100 Holstein steers . . . part of the herd, and part purchased. "I sell them when they weigh around

(Continued on next page)

1000 lbs.," said Andy. "They don't get much grain, mostly hay and silage."

A tractor and scoop is used to put the silage in self-unloading wagons, and from there to bunk feeders for the dairy, the steers, and dairy replacements. The cost of the silos was $1900 each.

Incidentally, two full-time men and two school boys make up the hired work force.

Additional income this year came from the sale of 100 tons of hay, plus 80 acres of wheat. Total farm acreage is 1400, with 650 acres tillable. — *H.L.C.*

FROM OLD TO NEW

Many of you will recall when most poultry houses were in units of 20 feet square, providing 4 sq. feet of floor space to each of the 100 hens. Then came a time when many dairy barns were converted to henhouses by putting in three or four floors. An average cow barn could house a lot of hens, and it worked rather well until big houses with hens in cages became common.

If you travel Route 20A between Lakeville and Geneseo in New York State, you will go by an abandoned dairy barn with windows on four floors. Some years ago the Carr brothers . . . Nathan and Ralph . . . kept 8000 layers in this building.

They started in business twenty years ago. Now they manage 53,000 in three one-story houses with the layers in cages.

Why the change? Let Nathan and Ralph tell the story:

"It required too much labor, and we weren't making much profit. We had automatic feeders and water, but the birds were on the floor, and we had to climb the stairs too often.

"We quit the old barn entirely five years ago. We now have three units . . . one constructed in 1962, one in 1963, and the last one in 1966. At present four men handle most of the work. Our equipment to candle and grade can handle 35 cases of eggs an hour.

"We produce about 100 cases a day, and sell to a broker in Corfu, who picks up the eggs twice a week.

"We buy some pullets at 20 weeks, but recently some have been grown for us by men who furnish only the building and labor. This way of raising pullets saves us a little money, maybe up to 25 cents a bird.

"We have 135 acres of land, with about 100 tillable. We spread the poultry droppings on it and then rent it to a neighbor who raises mostly corn.

"We use automatic feeders. We know that some poultrymen like feeding with power carts. We feel that is O.K. in a one-man operation, but with our size we like the automatic way better."

Change is the order of the day. Perhaps some dairymen have changed as much as practically all poultrymen, but the majority of dairy herds in the Northeast are still housed in stanchion barns, while almost no commercial poultrymen now keep birds on the floor! — *Hugh Cosline*

DAIRY OBSERVATIONS

Walter Von Matt operates a sizable dairy farm on the edge of the city of Rome, New York. He has 92 stalls in a conventional barn, and 170 free-stalls. In the summer, the conventional stable isn't used; the entire herd stays in the free-stall setup. Walter comments, "The cows that stay in the free-stalls are troubled less with disease . . . just seem to be hardier."

The neckboards used on free stalls here are made up of 2 × 10's . . . providing a convenient catwalk from which Walter can inspect the herd. He leaves all lights on in the free-stall barn at night.

The Von Matts have a section of the conventional barn reserved for growing calves . . . each one in an individual stall, boxed off from the next one with plywood. The floor of each calf stall slopes, and is raised above the concrete platform. Calves are started with warmed milk replacer fed from handy plastic bottles, fitted with nipples and hung from a wire fitting that hooks on stall fronts. — *G.L.C.*

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"I Wish I Had Started Using BOU·MATIC MILKERS In 1951!"

Writes H. P. RICHARDSON, Spring Grove, Va.

Preston Richardson, left; his father, H. P. Richardson and Bill Rhudy, Fieldman for Southeast Milk Sales, Bristol, Va., in the Richardson's milk room. The bulk milk cooler, foreground, is a 1250 gallon Dari-Kool.

Read MR. RICHARDSON'S Letter—

"I have used Bou-Matic milkers for about two years. I had used three other types of milking equipment since 1951. Before switching to Bou-Matic milkers mastitis almost put me out of the milk business. I used about $50.00 worth of antibiotics a month and the mastitis got worse. After using Bou-Matic milkers my cows quit kicking during milking, their milk production has increased and I no longer have a mastitis problem. I only wish that I had started using Bou-Matic milkers in 1951."

H P Richardson

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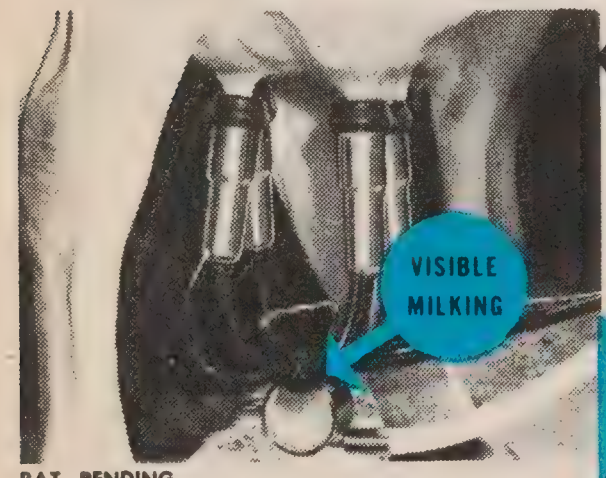

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THOUSAND-TO-ONE ODDS

by Bill Stempfle

AN informed source estimates that 25 or 30-plus proven Holstein sires are purchased each year by the AI studs, and there are 26,000 breeders of registered Holstein-Friesian cattle in America. On the basis of these figures, the chances of a dairyman selling a mature bull to an artificial breeding service is about a thousand-to-one.

In spite of such odds, 1969 burst upon the Francis Meehan family of Rexville, New York, in a veritable blaze of glory with the occurrence of **two** once-in-a-lifetime happenings.

In the first month of the new year, Admiral Imperial Chief, the five-year-old sire of the Frangin Holstein herd, was sold to the Curtiss Breeding Service . . . and 18-year-old daughter Barbara was honored with the coveted New York State Holstein Girl Award of 1969.

Either one of these events would have been sufficient achievement to inflate the ego of an ambitious breeder and devoted parent, but Mr. Meehan accepts his good fortune with the calm and modest demeanor of a man who has devoted all his energy to the development of a herd of superior cattle, and to rearing a family of ambitious and responsible children.

Humble Beginning

Those already-mentioned odds alone, in this game of skill and chance, are awesome . . . but the likelihood of Meehan hitting the jackpot was handicapped by the humble beginning of his career in dairy cattle breeding.

In 1944, at the age of 19, Francis bought the home farm on a contract for $3000. It comprised 140 acres of rough hilltop land at an elevation of 2100 feet, only 60 acres of which is tillable . . . he now leases 270 additional acres. His father worked in town, and the land was so impoverished that only 18 loads of loose hay were cut the first summer; and the barn was little more than a shed.

The next step was to acquire 12 grade cows, purchased on a milk check assignment for $150 each . . . about $100 more than they were worth, he now recalls. The monthly receipts amounted to about $180. Meehan's financial situation in that period brings to mind the story told of a neophyte agricultural agent who asked how the natives of a rugged New England county could exist on the small gross income to be derived from tilling the small, stony fields. He was told, "Young feller, we don't live on gross income; we live on lack of expenses!"

Start Purebreds

The first purebreds, purchased in 1949, were three heifers at an average price of $290. One of these was the great-grandam of Chief. In the same year, two calves were purchased at the annual Allegany Steuben Holstein Club sale at a cost of $100 and $125.

I asked Mr. Meehan why, at considerable risk to his meager financial resources, he ventured into the realm of purebreds. It was, he said, because when he went to the barn he wanted something more than to feed and milk "just cows". . . that he aspired to the ownership of superior cattle, and sought the additional income to be had in the sale of breeding stock.

Beginning in 1952, and for seven years thereafter, he bred AI with NYABC (now Eastern AI), and since 1960 has used Curtiss, concentrating on bulls of the Rag Apple strain. For the past two years he has used the services of Curtiss and American Breeders Service technicians.

Having established a sound

(Continued on next page)

genetic base for the improvement of the herd, Mr. Meehan subscribed to the DHIA Service in 1957. In the first year, 26 cows produced 11,018 pounds of milk and 413 of fat. Last year the rolling herd average of 32 cows was 15,317 pounds milk and 844 pounds fat.

An accurate evaluation of the production of this herd can only be made if one understands how the cattle are fed. Meehan does not believe in heavy feeding. Grain is fed milking cows at the rate of 1 pound (a 16 percent protein pelleted ration) to 4 pounds of milk, and never more than 24 pounds per cow per day. During the dry period a fitting ration is fed according to the weight of the cow.

He prefers timothy, orchard grass, and clover mix because grass makes for better condition; in his opinion alfalfa tends to overstimulate milk production. **But he insists on hay of prime quality;** inferior hay is sold and replaced by the best that can be found.

A year ago, he sold 44 tons of weathered hay and brought 32 tons of top quality. The switch cost $7 per ton, but the gain in milk production amounted to 2000 pounds per cow.

Hay is fed three or four times a day and silage twice, up to 50 pounds a day.

Long Life

Meehan is interested in longevity rather than high milk yield, and aims for a production at maturity of 16,000 to 18,000 pounds. An example of the merit of his management program is afforded in the matron of the herd, Ormsby Woosterdale Carnation, who is hale and hearty in her 17th year.

As a first-calf heifer she produced 12,730 pounds of milk and 498 of fat. At 7 years she made 23,800 pounds of milk and 890 of fat, and went on to achieve a lifetime total of 197,110 pounds milk and 6941 pounds fat. She was never milked more than two times a day, and has produced up to 120 pounds a day.

This cow weighed 1860 pounds when 7 years old, and was scored 92 when classified at the age of 12. The significance of that high rating is apparent when it is considered that less than 1 percent of all cows classified are rated excellent.

A grandson of "Rock," as she is known, is Londale Rex . . . one of the popular sires of the Eastern AI stud. In only one regard has this grand dame of the Frangin herd failed her master. Three times . . . in 1962, '63 and '64 . . . Mr. Meehan entered into a "planned mating" contract with the American Breeders Service, but on each occasion the blessed event gave birth to a girl rather than a boy! But then, the laws of nature always prevail . . . even in high-class bovine society.

Professionals are endowed with a strong streak of sentiment; Francis Meehan has a sincere affection for his animals. Ormsby Woosterdale Carnation, after calving in August, will be disposed of and buried on the farm . . . a well-deserved tribute to one of the great Holstein cows of our time.

In addition to upgrading the genetic base, Mr. Meehan practices rigid culling to improve the quality of his cattle. Selection begins with the calves, and all stock that does not meet his high standard are sent to market; none of those culled are sold for breeding.

Conformation, in his opinion, is definitely related to production and longevity, and the herd has been classified six times.

Of the 17 animals classified in 1960, one scored excellent and one very good. On the most recent classification there were two excellent and thirteen very good among 33 animals, and all the remainder scored 80+.

The consistent improvement in type is proof of Mr. Meehan's ability to judge cattle.

As a youngster, Admiral Imperial Chief was what educators term an "early achiever" in that he placed first as a yearling and a two-year-old at the New York State Fair. He then went on to win the coveted "All New York" (an award of the New York Holstein Association) for three consecutive years, and in 1967 placed first in the aged class and was proclaimed Grand Champion.

At the Eastern States Exposition and the Eastern National at Harrisburg Chief placed near the top in 1967 and '68.

A massive bull . . . he weighed in at 3080 lbs. at Harrisburg last September . . . Chief is so well-proportioned that he classified Excellent at 93 when four years of age.

Production-wise, he has proven his merit. Four milking daughters in the first lactation have an M.E. record of 18,640 lbs. milk and 648 lbs. of fat compared to their dams' 13-records average of 14,165 lbs. milk and 499 lbs. fat.

"Better livestock will be bred only by better men . . . who are keen, studious, diligent, imagi-

(Continued on page 27)

Use Banvel anytime until corn is 36 inches high

Corn one full yard high...yet it can still be protected from damaging broadleaf weed losses. Of course, the sooner you spray, the bigger your profit. A single post-emergence application of new Banvel herbicide controls Canada thistle, smartweeds, lambsquarters, velvetleaf, common morning glory, and many other troublesome broadleaf weeds. (Just one pigweed every five inches can cut yields 25%!) You can spray Banvel over the tops of corn plants up to the time corn is 36" high—or 10 days prior to tassel emergence—for higher, cleaner yields. Banvel doesn't make corn brittle, nor has it been known to irritate skin. Tangled weeds in equipment are a thing of the past when Banvel goes to work. Banvel is a liquid that readily washes out of sprayers. It is not abrasive and reduces wear and tear. It's not dependent on soil moisture to work. There is no dissolving problem to slow spraying or cause clogging; just fill and spray. Boost yields...reap bonus profits. Order today.

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HIGH-PRESSURE WASHING

A free 12-page booklet explaining the value and practical applications of high-pressure cold water washing for farm and industry is now available on request from Century Engineering Corporation.

The booklet is titled "Secrets of Cold Water Washing," and it explains the basic principle of utilizing 500 pounds pressure to peel dirt away without the need for hot water; the economy and ease of high-pressure washing of agricultural equipment, cars, trucks, farm and industrial buildings and floors; how to remove heavy grease deposits with cold water; and how to select the proper washer accessories to fit the job.

For your free copy of "Secrets of Cold Water Washing; write Century Engineering Corporation, 221 Fourth Avenue, S.E., Cedar Rapids, Iowa 52401.

DAIRY BREED ACHIEVEMENT

4-H places strong emphasis on leadership, citizenship, and upgrading of personal standards. An important part of the work lies in the projects . . . many and varied . . . carried on by the members, most of whom carry more than one.

The young people photographed below are the happy winners of the 1969 Dairy Breed achievement awards for New York State. Listed alphabetically by breeds, the winners are:

Ayrshire: Ellen Woodward Willard, daughter of Mr. and Mrs. Allen Woodward of Gouverneur; **Kenneth Burr,** son of Mr. and Mrs. Charles E. Burr of Trumansburg.

Brown Swiss: Brendy Snow, daughter of Mr. and Mrs. John C. Snow, Brookfield; **David Goodwin,** son of Mr. and Mrs. Ward Goodwin, Guilford.

Guernsey: Jane Keichle, daughter of Mr. and Mrs. Carl Keichle, Philadelphia; **Robert Hoffman,** son of Mr. and Mrs. Robert Hoffman, Perry.

Holstein: Barbara Meehan, daughter of Mr. and Mrs. Francis Meehan, Rexville; **Dale E. Putman, Jr.,** son of Mr. and Mrs. Dale E. Putman, Sr., Heuvelton.

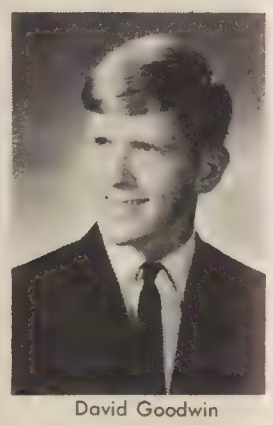
Jersey: Susan Cook, daughter of Mr. and Mrs. Alfred Partridge, East Durham; **Robert Dalola,** son of Mr. and Mrs. Robert Dalola, Sr., Berkshire.

Shorthorn: Susan Vaadi, daughter of Mr. and Mrs. Joseph Vaadi II, Lafargeville.

Ellen Woodward Willard

Kenneth Burr

Brendy Snow

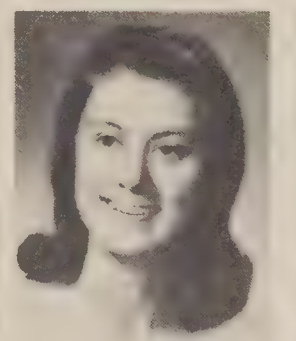

David Goodwin

Jane Keichle

Robert Hoffman

Barbara Meehan

Dale E. Putman, Jr.


Susan Cook

Robert Dalola

Susan Vaadi

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The stakes are pretty high. Too high to use old fashioned methods or products.

You've got all that money invested in equipment, fertilizer, seed, and manpower.

Now, the only things standing between you and a successful crop are insects, weeds, disease, and a little bit of luck.

And if you rely just on the luck and yesterday's protection methods you might be out of business. Today's problems need today's knowledge.

Your local USS AGRI-CHEMICALS man can bring that knowledge right into your field. His experience plus the services of Crop Protection Specialists and field agronomists is backed by a complete line of dependable pesticides and fertilizers...including famous VERTAGREEN.

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a Subsidiary of United States Steel

P.O. Box 1685 Atlanta, Georgia 30301

(Continued from page 25)

native, daring, and about whose integrity there is no question" writes editor Al Drowne in the February issue of the New York Holstein-Friesian News. That statement seems to explain Francis Meehan. But he would insist that the credit for his sucess be shared by **all** members of the family.

The prefix **Frangin** is derived from Francis and Virginia . . . the latter, of course, being Mrs. Meehan . . . and the ads of this establishment carry the footnote "The Francis Meehan Family."

All of the children, except Ronald, who serves in the armed forces, and Barbara, a student nurse, share in the care of the cattle and the work of the farm. They are William (22), Marlene (17), Theresa (14), Donald (12), and Larry (10). All are strong, vigorous people, and each has the same enthusiasm for dairy cattle as their parents. Few farms in America are so adequately staffed as Frangin Farm.

Daughter Barbara

That the children have inherited or acquired skill in animal husbandry is illustrated in the success of Barbara, who won the coveted State Holstein Girl Award for 1969. Beginning her 4-H career at the age of 9, she carried on a calf or cow project each year, has been a consistent exhibitor at the county and state fairs, and is rated an expert showman.

Her first project calf, Frangin Imperial Bonny, was bred to Irvington Pride Admiral of the Curtiss stud; that mating produced Admiral Imperial Chief. And so Barbara is the foster mother of this herd sire who has brought fame and fortune to the Meehan family.

Breed Booster

Generous in his support of the breed organizations, Francis has served as president of the Allegany Steuben Holstein Club, was chairman of the 1968 New York State Calf Sale (he selected the Steuben County consignment which topped the sale), and has been asked to serve as sale chairman again this year.

Meehan selected the entire consignment to the first Cornerstone Bred Heifer Sale, some 60 head, held at Bath, New York, last October.

The significance of the Meehan story is that ambition, intelligence and determination are essential to the breeding of superior dairy cattle, and that **material resources are of minor importance.** It is proof of the value of production testing and type classification, of expert feeding and management, and a sound breeding program.

But more than all of that, it is a story of the single-minded purpose of a man and his wife, supported by the efforts of their children, to breed superior cattle, and to achieve respect and honor for the Frangin prefix.

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The long and the short of buying a new elevator:

(Consider New Idea. It is long on reach and strength, short on price and upkeep.)

Here's a balanced, trouble-free elevator for easy one-man placement that will do the same work that requires a longer elevator of some other makes. The balanced, extra overhang beyond the wheels keeps the price reasonable.

The rigid, no-sag construction has deeply embossed areas around bolt holes that interlock to prevent bolts from shearing and joints from yielding. Added strength is provided by steel angles. A stress plate is welded to the bottom end of each section for extra strength.

We've flared the throat of the 10-foot "weightless" tilt hopper to let bales slide through easily. And improved the shelled corn saver for more positive separation.

Various lengths and drives to fit your needs. See your New Idea dealer soon. And get the long and the short of your next elevator. You'll like the price, too.

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Coldwater, Ohio 45828

MORE MILK . . . FEWER COWS

by Amos Kirby
New Jersey Editor

WANT to add 25 additional cow years of production to your 60-cow operation without increasing the size of the herd?

Here is an idea from Edward T. Oleskie, specialist in dairy science at the New Jersey Agricultural College. It starts off with good management of the herd, and involves extending the productive life of each cow by one month per year. This is possible through gentle handling of the herd, providing ample stable space and bedding, reducing the "hardware" hazards, following good milking routines, and the reduction of possible injury or udder troubles.

Over a five-year study period in a 60-cow herd, lengthening the productive life of each cow by just one month a year results in 25 additional cow years of production, with no additional capital investment.

IT'S HOT

If even one-half of what is claimed for it is true, it will be the hottest thing on the market in 1969. Its name is "Alar," and it appears to have solved three of the major problems in extending the picking season for apples.

Its other virtues, as explained by some of New Jersey's best and conservative growers, is that it holds the fruit on the tree better than other materials. By extending fruit tree life it provides better color . . . and that extra dash of color is what counts at the retail counter. Others claim that "Alar"-treated fruit will keep in common storage until June, and then it prolongs the shelf life of apples at the retail level.

EGG PRICES

The United Egg Producers believes egg prices can be stabilized. Their solution is aimed at the markets. Produce what the markets can absorb and stop there. At the farm level, avoid that 2 to 3 percent swing in supplies. For an illustration, look at the November 1968 market. Production was down 3 percent from the previous level, yet prices were 58 percent higher.

The United Egg Producers is being supported by the Board of Trustees of the New Jersey State Poultry Association's Egg Marketing Division. If the plan is approved, New Jersey will be represented by the New England Egg Marketing Association, one of five regional marketing groups.

A new approach to egg production, if one is thinking of start- an egg factory or one of those 30,000-bird units, came out of a horseback conference with a small group of egg specialists in New Jersey. The unanimous thinking of this group was, "Before arranging for financing and building a $150,000 unit for 30,000 birds, secure a contract to market the eggs."

An egg contract opens the door to the money room in most banks. An egg contract for more than one year means the operator has an assured market for the output. Many of New Jersey's "new men" in the egg business have found that they can ride the periods of low prices without going broke.

NEW DELAWARE CROP

Have you ever heard of Crambe or Sesame? Don't be surprised if it may show up in Delaware this year. It is a plant of the mustard family, prized for its oil content. The oil is valuable for its ability to withstand extreme heat and not break down.

Dr. Merle Teel, chairman of the plant science department at the University of Delaware, sees possibilities. He believes it should be used on a trial basis. Sesame oil production is increasing. In the ten-year period from 1957 to 1966, its production has increased from 13 million pounds to over 31 million.

COLLAR ROT

Planning on planting dwarf apples for the trellis system? Here are some suggestions from the College of Agriculture:

(1) Avoid poorly-drained soils. Collar rot is a problem on soils that have poor drainage.

(2) Fumigation of the soil is recommended if one is going to the expense of adopting the trellis system. Consult your agricultural agent on the proper material for fumigation.

New Jersey growers are taking a close look at the dwarf tree trellis system growing apples, and the drainage problem may be the route to success.

CHEMICAL THINNING

Chemical thinning of peaches versus hand thinning is gaining acceptance in New Jersey, although some varieties are more difficult to thin than others. Redhaven and Dixie Red are difficult; two applications of CPA helped. Easily thinned are Triogem, Newday, Sunhaven and Redcrest. Rio-Oso-Gem was thinned only slightly, yet hand thinning was reduced 40 percent. Air blast spraying seemed to accomplish a more even thinning job than the hand gun. Trees of low vigor were easily overthinned, as are weak limbs in a tree of good vigor.

ALAR®: a new orchard management concept

1. Stop-drop control. *One* application of ALAR . . . does it. Left side of this tree was treated with ALAR . . . right side was not. Since apple drop ranges from a normal 10 to 15% to as high as 70% in severe years, it's obvious your savings can be substantial with ALAR.

2. Firmer apples. Over-ripening and softening is delayed as the apples remain on the tree. In fact, pressure tests prove ALAR-treated apples run 1 to 3 pounds higher than fruit from untreated trees.

4. Stimulated flowering. Profits start here . . . at the budding stage. You can promote the development of additional fruit buds, and encourage a good return bloom (left) by timing your one ALAR spraying 10 to 14 days after petal fall. The same treatment will help bring young apple trees into a flowering condition at an earlier age.

3. Improved color. Here's another difference you may see as a result of Alar treatments. Red varieties often take on color earlier, turn deeper, brighter as ALAR works with nature . . . holding apples on the tree longer (left) to soak up more sunlight right up to harvest time.

5. Regulated vegetative growth. The same ALAR spring spraying (left) that stimulates fruit buds also retards vegetative growth by as much as ⅓rd for that season. You know what that means. Less pruning. More growth energy directed to profitable fruit-bearing production.

6. Delays Water Core. ALAR delays the onset of water core in Red Delicious apples. Left tray above shows ALAR-treated apples; right tray untreated.

Want to know more? There's a detailed report on next page

UNIROYAL

HELPING NATURE WORK FOR YOU

Here's how ALAR can work for you

ALAR is a growth regulant—a remarkable new *chemical tool*—actually a new concept for orchard management. Like all sophisticated tools, it must be used properly to achieve maximum results. ALAR helps you produce bigger crops of better apples. Lets you utilize new techniques that make production and harvesting more efficient . . . marketing more profitable. *You get a better price for better quality.*

As one major orchard manager, active in our ALAR test program, stated it . . . "I couldn't compete in the apple business without this new product."

Summer application.
(45 to 60 days before normal harvest)

You save on labor and avoid market gluts because ALAR keeps apples on the tree in prime picking condition beyond normal harvest time. Fruit won't over-ripen and get soft as it does when most stop-drop chemicals are used. Pressure test figures on apples treated with ALAR run 1 to 3 pounds higher than on fruit from untreated trees. And ALAR may even help red varieties become redder. In addition, the onset of water core in Red Delicious apples is delayed. *All benefits that boost your profit advantage.*

Or springtime application.
(10 to 14 days after petal fall)

You save on pruning costs because vegetative growth is reduced approximately ⅓ for that season. Beyond lower pruning costs, this allows more of the tree's capacity to be directed into producing fruit. These ALAR-treated trees develop *more fruiting*

buds. In apple varieties that tend to get too big or soft, ALAR also controls fruit growth to produce smaller, firmer apples. Springtime treatment with ALAR *encourages return bloom.* It can aid in bringing Golden Delicious trees into annual production.

You reset nature's time clock

Because of the reduction in vegetative growth and increased fruiting bud development resulting from spring treatment with ALAR, *young trees* come to *fruit-bearing maturity* several years earlier than normal. And the ability to control tree size will be a great advantage as orchard managers turn more and more to high density plantings.

Apply it ONLY once a year

It is important to note that trees should be treated with ALAR only *once* a year. Spraying time is *determined by the effects you desire.* As with all chemicals, ALAR must be used exactly as directed on the label.

These are the profit-producing facts about ALAR, the newest creation of Uniroyal research . . . a new orchard management tool that reduces drop and also increases fruit quality and storability. That reduces vegetative growth, yet increases fruit bud development. All these factors will help you to increase productivity.

Get your crop off to a profitable start. Visit your Uniroyal dealer soon, or mail coupon. ALAR and other growth regulants, herbicides, fungicides and miticides are creations of the laboratories of Uniroyal Chemical, Division of Uniroyal Inc.

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Send me the free booklet "50 Questions Answered About ALAR." At no obligation, of course.

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Jerry (left) and Jim Nordhus (right) of Marysville, Kansas, were among the first farmers in the nation to get hybrid seed wheat. Richard Bruck of DeKalb Agresearch in center.

HYBRID WHEAT

In August of 1968 DeKalb Agresearch Inc. announced the successful production of seed of fifteen different Hard Red Winter Wheat hybrids, and in the fall of that year hybrid wheat was planted on farms in eleven different states.

Hybrid wheat is something that farmers have been visualizing and waiting for since research began in 1960. One farmer in Montana who planted several acres of a new wheat hybrid in the fall of '68 reported having visitors from all over the state. Questions raised, of course, were:

"How did it stand the winter? Is it tillering heavier than normal wheat? Can you discern the increased vigor in the spring growth?"

Quantities available in 1969 will be relatively small, but wheat farmers will have an opportunity to look at **new varieties** which grew out of DeKalb's hybrid research effort. These new varieties are shorter than commonly-grown varieties, and offer wheat farmers an opportunity to increase yields and gain greater efficiency on every acre.

What will hybrids cost? With high seeding rates (one bushel or more on most wheat acres in the U.S.), and low per-acre yields as compared to corn and grain sorghum, it is apparent that the same economic factors cannot apply.

Using a hypothetical situation of 40 bushel yields and a price of $1.25, hybrids could be expected to boost yield 25 percent, or 10 bushels. At present price of about $1.25, farmers would receive $12.50 from planting the hybrid.

New approaches are constantly being explored, among them the sale of foundation seed to the farmer, which would allow him to produce his own hybrid seed, much as the western farmer now produces his own seed with the varieties he is presently growing.

Plant breeders are working on hybridizing the soft white wheats more commonly grown in the Northeast, but their development is behind those varieties suited to the Great Plains states.

The Song of the Lazy Farmer

I know some folks, and so do you, who shy away from something new. They just don't like to change their ways, and so they live out all their days without adopting new ideas that might give them more cash or ease. " 'Twas good enough for Paw," they claim, "and so for us it is the same." Result is they're like stubborn mules, they won't adopt new farming tools 'til after neighbors use 'em for a half dozen years or more. They're last to plant new kinds of seeds, they don't believe in spraying weeds, and 'bout new-fangled feeds they'll joke while stock gets thin and they go broke.

Thank goodness, I am not that kind; I'm always more than glad to find a way to make life easier or my bank balance bulkier. I grabbed at hybrid corn with speed to skip the fuss o'er my own seed; since weeds need just a squirt or two, why should I own a scythe or hoe; and I can farm just half my fields with fertilizer doubling yields. But finest change that I have seen is doing farm jobs by machine, 'cause now Mirandy doesn't scream like when she had to use a team, and each day work is done so soon that I can fish all afternoon.

NEW *Hy-Dro-Driv'n* FORAGE HANDLER!

WORLD'S FIRST HYDRAULICALLY DRIVEN FORAGE HANDLER

Grove introduces the first self-unloading forage body powered completely on the tractor's hydraulic system . . . No PTO shaft to hook-up . . . New drive provides fast, smooth, safe and trouble-free unloading . . . left/right or out the rear. Simple push/pull control knobs. Deck drag chain infinitely variable from slow through "sweep". Fewer mechanical parts greatly reduce upkeep. Write for details on the most modern forage body you can buy.

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TELL IT LIKE IT IS

by H.E. Conklin*

"AGRICULTURE" is a nice word . . . it suggests something clean, wholesome and dignified. It goes with manufacturing and commerce to form the great triumvirate of major activities by which man provides for his material well-being on this planet. It is part of a world in harmony with the natural order.

"Farming" is a dirtier word . . . it brings in the nitty-gritty. It often implies the image of a struggling man, a presumption of ignorance and inefficiency, a degraded social position, a stage of human existence we long have aspired to surpass. For vast numbers in the United States it is the occupation of our forefathers, who indeed made their mark, but also gave us the spark to go "higher."

And "agribusiness" is a word just born.

Since "agriculture" is nice and "farming" is not, farming has become agriculture throughout our language. We have what is really a census of farming that we call the "Census of Agriculture." We present information on the value of the farm plant and call it "investment in agriculture." We speak of the "agricultural labor force," but the data show only the farm labor force. And we speak of the ratio of 40 people to one farmer in the nation as a measure of our high agricultural efficiency.

If there are two words for the same thing and one is nice while the other is not, why use the one that is not? For many years the obvious answer to this question raised no problems, but this has changed.

The stage for trouble was set long ago when the first farmer bought a hoe. From that day on it took more than farmers to feed a tribe, or a nation. And from that day on part of the workers in agriculture were in town.

Though workers in town were needed, there still were a lot of farmers, even in this advanced nation, until recently . . . so many that their voice was heard loud and clear throughout the land. Agriculture held a secure position in the scheme of things, even in a heavily-urbanized state like New York.

In those days we bragged successively over the years that one farmer fed 20, 30, 40 nonfarmers . . . and we got away with it. No one objected on the ground that farmers no longer were producing food by themselves alone, and no one had yet jumped from declining figures of farm numbers to the conclusion that "agriculture is a rapidly dying industry."

Broken Roof

Then the roof fell in! In the short span of two decades, statements like the following multiplied until now they are all about us:

"Agriculture appears approximately insignificant (in New York)."

"Agricultural employment declined 35 percent from 1950 to 1960 (in the Appalachian counties of the State). Any reasonable projection of this trend indicates that agriculture will supply almost no employment by 2000 or earlier."

"No claim can be made that the economy is predominantly agricultural (in Chenango, Delaware and Otsego counties) . . . the regional economy is an urban economy. That is, the activities which comprise it, by and large, are urban activities such as manufacturing . . . if the current trends continue, it can be expected that the agricultural sector will decline even further in the three-county area."

"There are so few people in agriculture in this state that we no longer can justify specialized agricultural institutions."

"The College of Agriculture could raise more money and attract more students if it could get rid of the word 'agriculture' in its title."

"I don't worry about farmers; they are growing fat selling land to city people. Pretty soon they will all be city people anyway."

"We should preserve some agriculture in New York. It makes the countryside more attractive and woodland margins provide better wildlife habitat than unbroken woodland."

Declining?

Suddenly farmers are spotlighted as a declining minority. Agriculture is identified exclusively with farming, so agriculture is seen as a declining minority industry.

Being recognized as a minority could be very convenient at this point in history, but not so un-

(Continued on next page)

*Professor of Land Economics, Cornell University

Before you buy, trade or deal ...see the new Owatonna Custom 700

You've looked over the "new" windrowers and figure you've seen everything. Figure again, because here comes the Owatonna Custom 700.

We'd ask you to compare, but there's nothing on the market like it. Not when you consider the "custom" styling, features and price value. Go with the direct feed header (9'9" cut) and you've got a years-ahead self-propelled mower-conditioner. A full-width (110") conditioner that lays full swath or windrow in any forage crop.

Or choose the conventional draper header with tractor-mounted 103 crop conditioner for all-crop performance. Either way, the 700 tractor delivers power plus with its new Model 225 CID Chrysler engine. Either way, you get L-shaped tractor construction for great machine balance and handling ease.

Before you decide on a windrower, see your Owatonna dealer. He has what's *really* new in crop harvesting.

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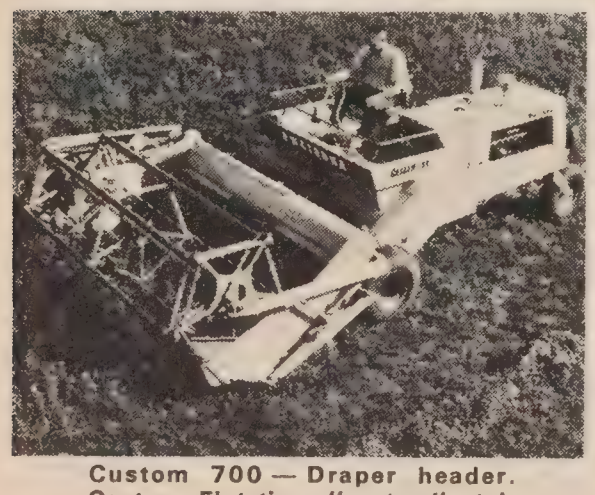
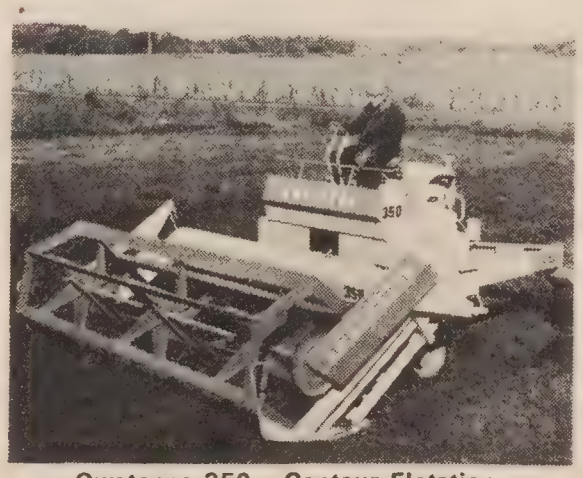
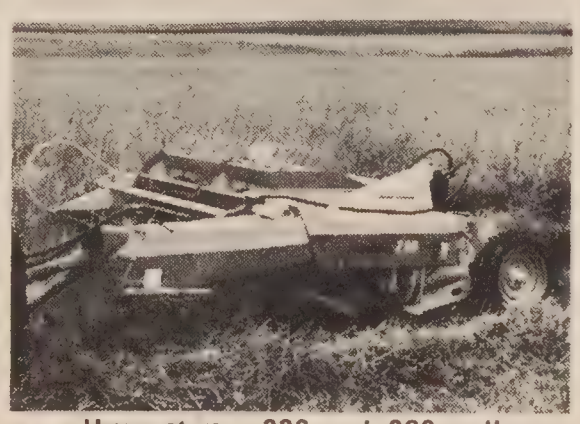


Custom 700 — Draper header. Contour Flotation, "custom" styling . . . for multi-crop harvesting.



Owatonna 350 — Contour Flotation, draper header . . . choice of Ford or Wisconsin engines.



Haymasters — 220 and 230 pull-type models. Full swath or windrow. For all forage crops.

less you are a **militant** minority. This, farmers are not . . . they can be liquidated quietly. And why not?

The best answer for those who ask "why not?" is this: Because there is a lot more to agriculture than farming. If all farms in New York disappeared tonight, many more than farmers would awake tomorrow without a job or with only part of a job. To remove farming from New York would leave a far bigger hole in our economy than occurred when the textile industry pulled out to go South. And New York struggled for a long time to fill that hole!

Even today, with no big new holes in our economy, State promotional agencies brag loudly when they "capture" a new plant that employs 500 people.

More Than

Agriculture is more than farming, and the difference is **agribusiness.** Agribusiness is the modern counterpart to the man who first made a hoe for sale to a farmer. It extends back to the mines, the forests, and the oil wells, and forward to the processing plants, the wholesale distribution centers and the grocery stores.

When we cut New York off from the rest of the nation and speak only of agribusiness that is related to New York farming, we lose the possibility of including some of the agribusiness activities that supply New York farmers (most farm machinery, for example, is made outside the State) . . . and we lose the possibility of including the transport, processing, and sale in New York of farm products raised in other states. We still include, however, a large volume of the activities that bring over 800 million dollars worth of direct inputs annually to farmers, on the one hand . . . and process, transport, and sell the one billion dollars in products that New York turns out each year, on the other.

We have relatively little precise information on the nature and size of agribusiness activities. The structure of our data-collecting processes has allowed these to become thoroughly intermingled with nonagricultural activities of all sorts. Our data, in fact, are so confused that planners . . . and even some economists . . . often speak of agribusiness as though it could exist apart from farming!

To picture agriculture in true perspective, a lot of work needs to be done to disentangle agribusiness from other activities. The resulting information then needs to be combined with the large amount of data we already have on farming. This composite then will realistically represent what it takes to feed and clothe this nation. It also will make it much more difficult for urbocentrics . . . and these are the majority today . . . to discuss agriculture as a "dying industry," even in New York.

A lot of work needs to be done, but pending the outcome of this work we can begin to make room for its anticipated results. We can start using the words "farming" and "agriculture" in a manner that is consistent with recognition of agribusiness as a mutually-interdependent partner with farming.

We have chosen for long years between the words "agriculture" and "farming" on the basis of the aesthetic attractiveness of the images they evoke. Now we have another basis. In order to make room for agribusiness, the word "agriculture" must encompass more than farming. Let's use it that way!

Then let us speak with pride of **farming!** It will be better to re-educate tastes in the use of words than to forget what it **really** takes to produce our food and clothing . . . and better also than to forget the source of employment for an important segment of our population.

Protection — Electrical conduits, switch and fuse boxes located in the building driveway are protected against side swiping by tractor-drawn machinery and loads. Heavy pipes are set in concrete a short space in front of the wall and the electrical equipment.

"DEKALB Sudax Brand really makes milk and sure saves on hay."

Dairyman finds Sudax Brand hybrids boost summer milk production.

Richard W. Gladfelter, Littletown, Pa., feels DeKalb Sudax Brand could be the greatest summer milk producer—ever. It's the forage crop that keeps milk production high during the hot summer months.

"We have about 40 acres of DeKalb Sudax Brand SX-11, SX-5, and SX-12, and I like them all equally. I have about 100 milking cows. We green chop morning and night. Sudax Brand really makes the cows milk. When it's wet and I can't chop, I can see a big difference. Sudax Brand really makes milk and sure saves on hay. It really grows!"

Sudax Brand can help you make *more* pounds of milk at lower feed cost. A University test shows it's superior to alfalfa for-palatability and digestibility. Sudax Brand resists drouth, insects, disease, and it grows and re-grows like nothing you've ever seen. It's also one of the world's most versatile forage hybrids. You can use it for green chop, pasture, hay, haylage, cover crop or plow-down. It's a money-maker, many ways.

Your DeKalb dealer has Sudax Brand varieties bred for your climate and conditions. See him today.

DEKALB SUDAX® BRAND

"DEKALB" and "SUDAX" are registered brand names. Numbers designate varieties.

Dairymen agree Sudax Brand helps pour-out the milk.

"We really like Sudax Brand: all farmers should use it for better milk checks."

Anthony Walter, Loyal, Wisc.

"We've found Sudax Brand increases milk production. It has been planted on our farm since it was first introduced."

Edward Moseley, White Plains, Va.

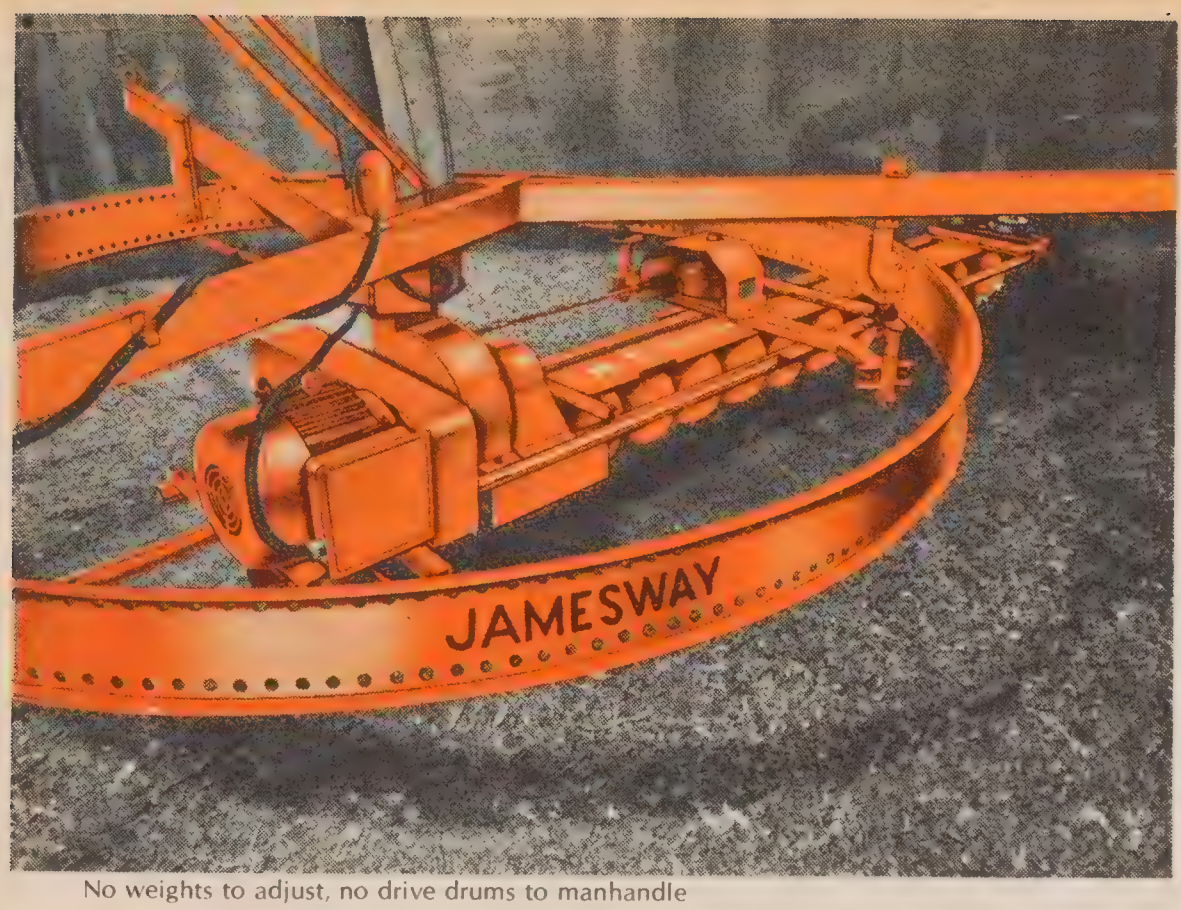
"We have been green chopping for the last 10 years and nothing compares to DeKalb Sudax Brand."

Robert Holloway, Sparta, Ill.

"I just don't know of anything to equal DeKalb Sudax Brand SX-12 for haylage, green chop, hay and pasture.

Thomas Jones, Fredonia, Ky.

Ask for Sudax Brand by name. It belongs on your farm.



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Cuts level from top to bottom! Can't ride over frozen silage or bury in newly-filled silage.

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Chatham, Bervy Equipment Co., Inc.
Clymer, Dandee Service
Cochecton, Cochecton Mills
Croghan, R. B. Farney & Son
Dover Plains, Smith's Garage of Dover, Inc.
East Springfield, Homer Fassett
Ellenburg, Floyd Lashway
Elma, Smith Farm Supply
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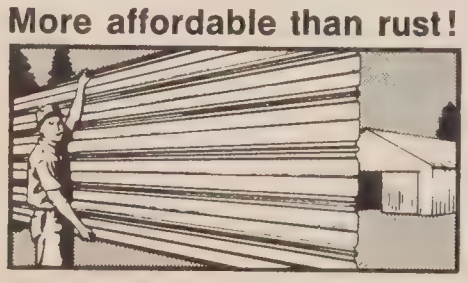
Galvanized sheet starts to rust within one to seven years, according to official tests. The problem then is to repaint it regularly, or let it rust. Aluminum solves the problem with solid corrosion-resistant protection against rust and weather—proven in modern farm roofs. Specify Kaiser Aluminum for your next farm building.

More affordable than rust!



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MOTOR ADVICE

Having spent thirty-five years servicing electric motors (the last fifteen servicing motors from rural areas), I do not understand why many farmers are so careless in the installation, care, and use of such a needed and valuable piece of machinery as the electric motor. Most people would not think of neglecting or abusing hired help the way they do some of their machinery, and in many cases the electric motor does take the place of extra help.

Moisture is one of the main causes of damage to electrical apparatus, and in spite of the fact that new insulations and varnishes have been developed by the manufacturers, moisture will creep into the windings, bearings and switches. I have seen many times, either on service calls or sales visits, motors on hay conveyors, chopper box unloaders, and barn cleaners completely exposed to the weather, even in midwinter. On many water pump service calls, I have found leaky joints spraying water on the motor, eventually working into the bearings, capacitor or windings.

Dust Problem

Dust is a constant threat to all motors in or around farm buildings, as hay, straw and feed being distributed each day generates considerable dust and can be drawn into any type of open motor by its ventilating fan. Eventually, this dust gets between the starting switch contacts, causing starting failure, or it fills up all avenues of ventilation, so the motor overheats and burns out.

Fire danger is great here, not only from the possibility of a burned-out motor, but from ignition of the dust and chaff by the spark generated each time a motor starts. The answer to much of the dust, moisture and fire problem is to install totally-enclosed motors wherever possible.

Finally, the one great cause of motor failure on the farm is improper lubrication . . . either too much or none at all, or use of the wrong kind of lubricant. A wrong lubricant can either be too thin to properly lubricate, or so thick it fills the grooves in the bearing and prevents circulation around the shaft. In a ball-bearing motor, it can cause overheating and wear, because it will not stand the pressure between bearing and race. Overlubrication of either type bearing with oil or grease damages starting switches, brushes and internal wiring.

If owners would heed the manufacturers' instructions on lubrication, many maintenance dollars could be saved. No one likes a big repair bill or cost of replacing a motor, and a little attention to the first signs of trouble, and protection from the elements could save considerable loss of time and money.— *Frederick C. Fay, Burlington Flats, N.Y.*

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Mr. Norman Hotvedt
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"The Rolling Cultivator produces a good soil mulch, and you can quickly adjust the gangs to work the ground perfectly throughout the growing season.

"You need no extra killing attachment—just adjust the gangs and they make a perfect kill."

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cultivates crops • mulches soil • bars off
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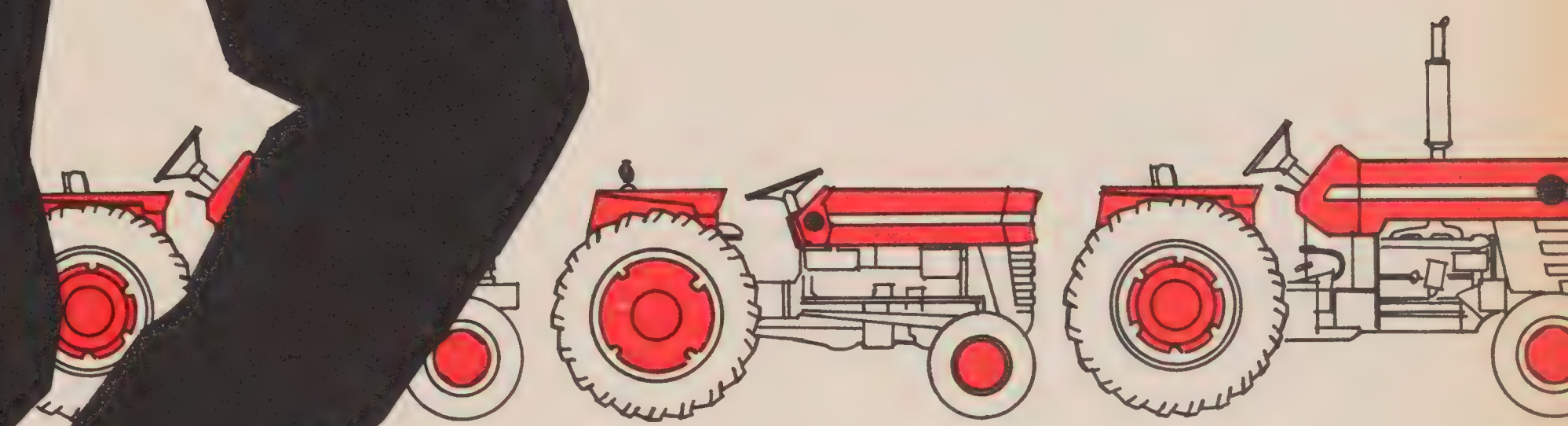
SAVE MONEY.

Make a tractor deal now with the man in the red tie during Massey-Ferguson's Red Tie Sale.

Limited time only.

Your trade-in may cover the down payment.



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Make a Red Tie buy from a Red Tie guy and save during MF's Red Tie Sale.

Massey-Ferguson The Challengers

Massey-Ferguson Inc., Des Moines, Iowa

Photo: Northeast Producers' Guide

Donald Robin uses an electric-powered feed cart to feed young birds.

STARTER SPECIALISTS

Wilson Robin and son Donald of King Ferry, New York, raise 113,000 laying hens a year . . . but buy eggs at the supermarket! They're specialists in raising started pullets, and the birds move out to other henneries at 20 weeks of age, just as they're beginning to lay eggs.

Most of these birds are reared in a 38×224-feet cage house, but a converted layer house is also used to rear floor birds (with coal brooders) in batches of 18,000. The big cage house has a capacity of 37,400 . . . it is presently carrying its fourth batch.

The middle deck, and certain sections of lower decks, are used for starting . . . these have floors of wire with ½×1-inch openings; all cage floors are flat.

No paper is used on cage floors, and chicks eat directly from heaped-up feed troughs . . . prevented from escaping through cage-wire openings by an ingenious arrangement of adjustable extra wire pieces held on the outside of cages.

Pullets of the current batch were started at 31 per cage . . . each cage measuring 24×24×14 inches. This is reduced to 17 per cage by 2-3 weeks of age, and then changed to 12 birds per cage at 8 weeks of age . . . at which time 5 birds per cage are removed and sold.

There are four rows of triple-deck cages suspended by T-bars from the ceiling. Truss rafters that carry the load have 2×10's for lower members, and 2×8's for upper members . . . glued and made up on the job with ¾-inch plywood for gusset plates.

Electric Cart

Birds are fed by an electric feed cart (battery-powered but high-line charged) serving three decks. This isn't the most satisfactory way to handle feed, according to Wilson, but it eliminates one of the building-cleaning problems the Robins feared might develop with automatic feeders. All feed except a commercial supplement is home-grown on the 500 acres in the farm, the grain converted to growing mash by a portable grinder-mixer.

Lights are 25-watt bulbs operated on a dual-voltage system . . . 120 volts with white light for the first week or two after chicks arrive, then down to 60 volts by means of a single tumbler switch. After this, the higher voltage is used only when the Robins are working in the building.

When the birds are four weeks old . . . and beginning to feel like using their beaks on each other . . . the Robins switch to red bulbs. This prevents cannibalism effectively, but it doesn't make Wilson and Don very happy to grope around in the red light! Birds are debeaked at 16 weeks of age.

Light Blocked

Until birds reach that age, custom-made light filters . . . designed by the Robins . . . are used on the eight 10,000 cfm fans. Ventilation slots are conventional around the eaves of the building, with a blackout feature to prevent any light leakage.

The building is heated by two oil-fired boilers connected in series . . . a total net output of 320,000 BTU. A high-velocity oversize circulator forces hot water through the 1100 feet of 1.25-inch pipe around the perimeter of the building.

There are approximately 200 feet of commercial-type finned pipe alternated with the plain black pipe throughout the building. Wilson reports the heating system expensive initially, but very satisfactory, and economical to operate ($250 oil cost for 30,000 birds reared in winter of 1967-68).

Manure is pushed from pits under the cages into a cross-conveyor by a small garden tractor powering a commercial scraper.

(Continued on page 37)

400,000 farmers recommend the new FAHR way to faster and better hay

There is a new, proven way to faster and better hay. Now, you can get faster and better hay with the Fahr Centipede Haymaker developed by the Fahr Machine Company, a leading overseas manufacturer of farm equipment since 1870. In the past seven years, more than 400,000 Centipede Haymakers have been put to work on farms in every part of the world. They are available through your local dealer in 8½′, 16′ and 22′ sizes — ready to make hay for you at the rate of 8, 16 and 22 acres per hour.

UNIQUE OPERATING ADVANTAGES

Time, labor and maintenance saving Fahr Centipede Haymakers completely turn, evenly spread and fluff hay either from swaths or the heaviest windrows. Curing hay the Fahr way is much faster than crimping or roll conditioning since the air freely circulates through and underneath the hay. Leaf loss is avoided with maximum saving in nutrients. In many humid areas — even in the Northeast — crops handled by the Centipede Haymaker are often ready for baling the same day they are mowed. The Haymaker can be converted from tine conditioning to windrowing in seconds by adding a reduction gear. Unlike crimpers, roll conditioners and mower-conditioner combinations, it will unfailingly work over the same crop after each rainfall.

RUGGED YET SIMPLE DESIGN

Design of the Fahr Centipede Haymaker is simple and sturdy. Each machine operates from one to three pairs of interlocking, star-shaped, synchronized double spring tines rotating in opposite directions to mildly crimp the hay after it is picked up. By following ground contours, the Haymaker uniformly removes hay from humps, hollows and inclines. Whether the crop is long, dense, tangled or soaked, Haymakers will not stall.

WHERE TO SEE IT

When you use the Fahr Centipede Haymaker for faster and better hay, you beat the weather — make hay every acre of the way. For the answers to why more than 400,000 farmers recommend the new Fahr Centipede Haymaker for faster and better hay, ask your dealer to call or write . . .

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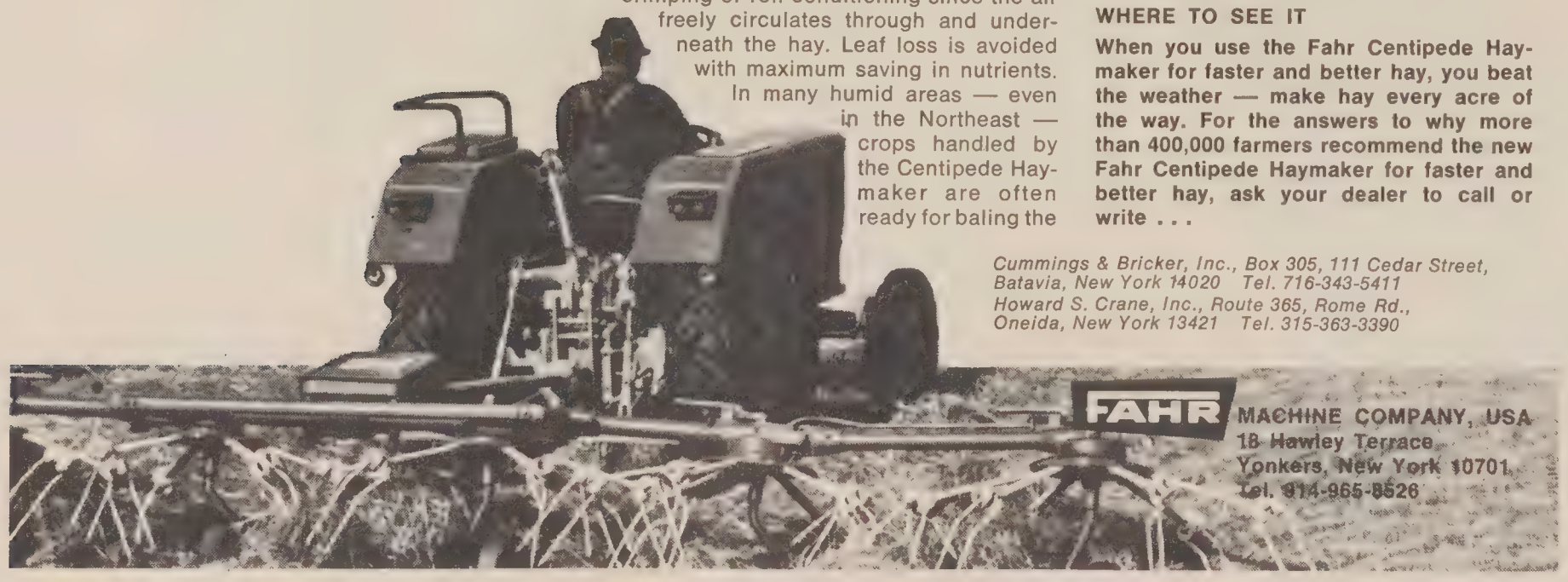

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Tel. 914-965-8526

Food For The Spirit

by Robert Clingan

THE VIEW FROM A HOSPITAL WINDOW

It was a small room in a hospital. The window itself was small. I had been there many times before, calling on members of my parish who occupied that room a few days at a time.

On the occasion of this call, my friend the hospital patient forgot her own problems for a moment and said, "You get a wonderful view from this window."

"A wonderful view from a hospital window!" What was so amazing about her response. No one else had noticed that view before or described it with such detail. She mentioned the Christmas street decorations, the Christmas lights and what time they came on. She outlined for me the beauty of the evergreen trees in the front lawns across the street, and the profile of a hill in the distance above the houses. From a small window she had a wide vision of the world outside the hospital walls.

She saw what others missed. She enjoyed what others failed to enjoy. She used the small framed glass hole in a wall better to see and understand the larger world outside. Traffic lights, trees, houses and hills, people coming and going, all these enlisted her attention, and contributed to the relief from the monotony of a forced hospital visit. Her life was enriched by what she saw beyond the walls of her hospital room.

How was it that she saw so much and others saw so little? Perhaps because they were confined by a concern for themselves, overburdened with their own afflictions and anxieties. They were not free to look out of the window of their lives and their room and see the world around them. If they could have, with curiosity, imagination, and pleasure, it might have made it a little easier to accept with good grace what was essential to their recovery. Who knows how many of their symptoms reflected the inwardness of their lives that kept them from looking out of the window?

We ought not to judge too harshly or criticise those who cannot look out of the windows, and see so little when they do. But we can be glad for those who do, and try to follow their good example. Look out from yourself, through the windows of the walls that surround you, see the world, and be glad to be alive.

Starter . . . . .

(Continued from page 36)

This is done when birds are 12 to 14 weeks old, and again after pullets are sold. Dropping boards are cleaned by hand scrapers 30 times during the 20-week growing period . . . a total time requirement for one man of 60 hours. Boards are ⅜-inch exterior plywood treated with a mixture of parafin and hot kerosene (5 pounds in 5 gallons).

The building foundation is a conventional concrete slab and block. The walls are of polyurethane "sandwich" construction . . . a waterproof board-type insulation that is 1.25 inches thick in the ceilings, and 1 inch on sidewalls.

Electrical power is critical in any high-density poultry house like this; there were six power interruptions of several hours' duration last year.

An alarm system sounds off at Don's home if temperature rises . . . or drops . . . beyond preset limits, or if high-line power goes out. After the birds reach 12 weeks of age, someone must be with earshot of the alarm 24 hours a day . . . so the auxiliary generator can be wound up in jig time if something goes wrong.

Water is carried to birds through plastic pipe; it is gravity-fed from overhead tanks, rather than being on direct line pressure. There is a Hart cup in each cage . . . with trigger extension the first week to help the "little bitties" get the hang of drinking. All water is filtered to remove sediment.

At one time, the Robins bought chicks, raised them to sell themselves. But now they're tied in with a large hatchery, and they prefer the present arrangement. In an age of farm specialization, Wilson and Don have specialized even further by doing only a portion of the chain of events from hatching egg to eating eggs.

They're more generalized, though, on their 500 acres . . . growing corn, snap beans, wheat, and hay . . . as well as custom-picking corn for neighbors. Whether working as inside specialists or outside generalists, Wilson and Don are constantly figuring on how to do the job more efficiently. — *G. L. C.*

K-Mag®

Gives your fruits and vegetables more get up and GROW

Agricultural authorities are discovering alarming deficiencies of magnesium and sulphur in soils in many areas of the country. This can seriously affect the yield, quality, and profits of many crops.

Many present-day high-analysis fertilizers cannot replenish soils with the magnesium and sulphur removed from soils by most crops. That is why such fertilizers should be fortified with K-Mag. It contains ample amounts of magnesium (18% MgO) and sulphur (22% S)—plus potash (22% K_2O) in a non-chloride form.

As the key element in chlorophyll, magnesium is vital to the process of photosynthesis. Also important to the profitable growth of plants is the role magnesium plays in helping the plant absorb phosphorus. Magnesium also helps plants withstand harmful effects of insects, spray chemicals, and cold weather.

Increasing importance is being placed on the need for sulphur in fertilizers. Sulphur is part of many proteins, vitamins, and enzymes. It helps establish strong root systems and encourages vigorous plant growth.

The potash in K-Mag is virtually chlorine-free—less than 2.5%—and is completely water-soluble.

Ask for fertilizers containing K-Mag and be sure your crops will bring you higher yields and increased profits this year.

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SPREAD OUT AND LIVE

by J.R. Van Allen*

SINCE everyone else is writing and speaking about our national problems, why don't I add a comment or two. Poverty, racial conflict, urban decay, outmoded government institutions, inadequate education, inflation, crime, air and water pollution, and snarled transportation are cussed and discussed, and all sorts of solutions are being put forth.

It is alleged that these problems are too complex for simple solutions. Anyone who offers such solutions is branded a fool. But maybe the fools are those who "can't see the forest for the trees," and who become so involved in complicated theories they confuse themselves and everyone around them.

One approach to these problems that seems to have gone out of style is good old-fashioned common sense. Well, at the risk of being branded a fool, let me take a whack at our troubles.

When you look at the list of ills I have mentioned above, they all seem to have a common denominator. There are too many people jammed into too small a space. Did you ever see a cornfield where the farmer sowed too much seed . . . all stunted, sickly-looking plants from lack of food, water, and sunshine? The same thing happens when you pile people on top of one another in a city; only it's worse with people because they are more complex than corn plants.

I could take each problem and develop the thesis that it is caused by overcrowding, but I won't. You do it. The thinking will do you good. But when you get all done you will find that too many people in one place creates situations that only vast expenditures of money could improve.

The Solution

All right, you say, then what is the solution?

To begin with, let's start to change our thinking. For instance, instead of spending ten years and hundreds of thousands of dollars studying where to put another jet airport for New York City, why not study how to move some industry and business out of that area into the agriculturally-poor hill country of southern New York State?

There, on land that isn't fit for growing food, jobs could be provided that would suck people out of the city center. They could spread out, relieve their tensions, breathe fresh air, and begin to live like humans instead of piled up like aphids on a cabbage plant. Then the site for the new jetport could be located much farther from the city.

In this day of modern communication, why does big business need a city address? Are the managements of some of these corporations in a rut? Are they still thinking of "ye olden days" when you had to be in a city to have enough help nearby? Some might ponder the fact that the automobile has brought about some changes. They might also ponder the fact that as city living goes up in cost, or the price of living outside of and driving into the cities goes up, unions are going to have to get their people more pay increases. And around we go with more inflation!

Just the other day I read of a proposed new skyscraper in lower Manhattan that would provide office space for six thousand more people. Holy Smoke, somebody must be kidding! The present river of people chokes the Lincoln Tunnel and the Long Island Expressway (Distressway) now! Keep jamming more people into the city and it just takes more time for all concerned to commute; time wasted and taken out of daily living.

Sure, it would take money to move out! But would it take any more than what we are spending now or need to spend to overcome our problems? We can solve our city problems right now by spending enough money, but when we get all done we will still have a place where

(Continued on next page)

*Litchfield, Conn.

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☆ T.D.N. (Total Digestible Nutrients).

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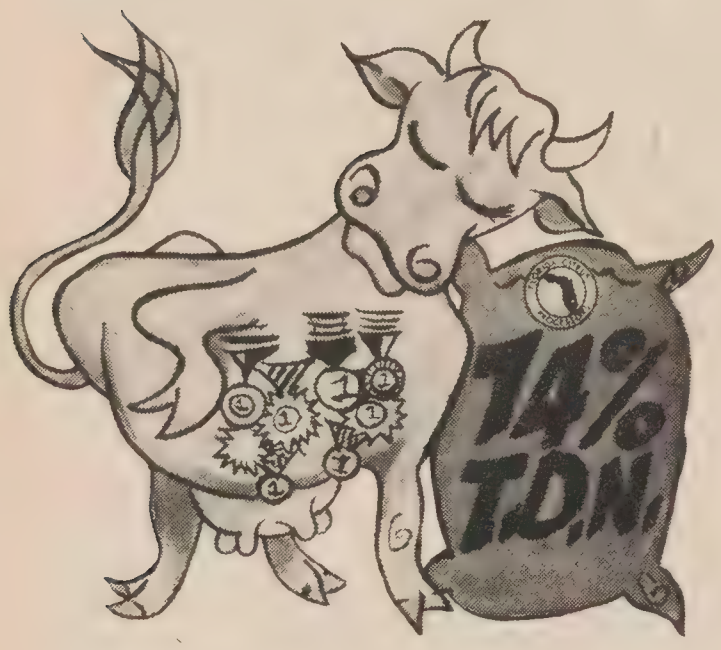

Vital to any feeding program are sufficient digestible nutrients, along with proteins and minerals. Digestible nutrients are an important part of a feeding program and Florida Citrus Pulp is your best feed buy because it has 74% T.D.N. Before planning your next feeding program, consult your dealer or distributor about including Florida Citrus Pulp in your dairy or beef feed mixes . . . available in bag or bulk . . . by rail or truck.

For more information on Feeding or Total Digestible Nutrients, send for a FREE full color Citrus Pulp Brochure, or send for "Men Who Feed the World," a 16 mm color film for group showing.

Content	% Protein	% Fat	% Minerals	% Fiber	% N.F.E.*	% T.D.N.**
Citrus Pulp	6.0	3.0	4.2	16.0	55.0	74.0
Beet Pulp	9.2	0.5	3.4	19.8	57.2	67.8
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(* Nitrogen-free extract ** Total Digestible Nutrients)

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people will live with constant tension and in concentrated targets for nuclear attack. Just the fact that population and industry dispersion would make it more difficult for an enemy to wipe us out in one blow ought to appeal to a lot of people.

Bare Bones

I know this is just the bare bones of an idea. Means would have to be found to lure business and industry out of the cities. The government would have to do a lot of pump priming. But if such a move became our long-time national purpose it would be done. People would ultimately live more normal lives, and poverty, ignorance, and strife of all kinds would find it more difficult to survive. Furthermore, there is great truth in the idea ... give a man a piece of land of his own and you will cure him of communism.

Died-in-the-wool city people would, of course, fight such an idea. I lived in New York for a few months one time, and I found a lot of people who didn't think there was anything west of the Hudson River. That's all right; we wouldn't want to move everybody out of the cities. Our purpose would only be to spread people out a little more so their problems could be handled in smaller and more manageable doses. The young, the vigorous, and the adventurous would move where the jobs were. It has always been thus. That's how our population spread from coast to coast in the first place.

I began life in Chicago, and know something of city life. I have also lived in small towns or rural areas for the past twenty years. For average people there is a vast difference in the quality of living between the two ... and it is in favor of small town and rural living. Let's shape our destiny so more people can find this out.

OPTIMISTIC

Possibly I am terribly optimistic, but I think America's capacity to express itself in any number of ways is, in a sense, a guarantee against ultimate violence and revolution. A boiling kettle only explodes if a lid is held on tight.

In my youth, in Wisconsin, an influx of very able, hard-working German Catholic farmers moved in to a rather easy-going and unsuccessful Yankee community. The threat to the Yankees' way of life resulted in the formation of a Ku Klux Klan and the burning of crosses on the lawns of our German-Catholic neighbors. Who would have thought that a few years later we would have accepted and idolized a Catholic President?

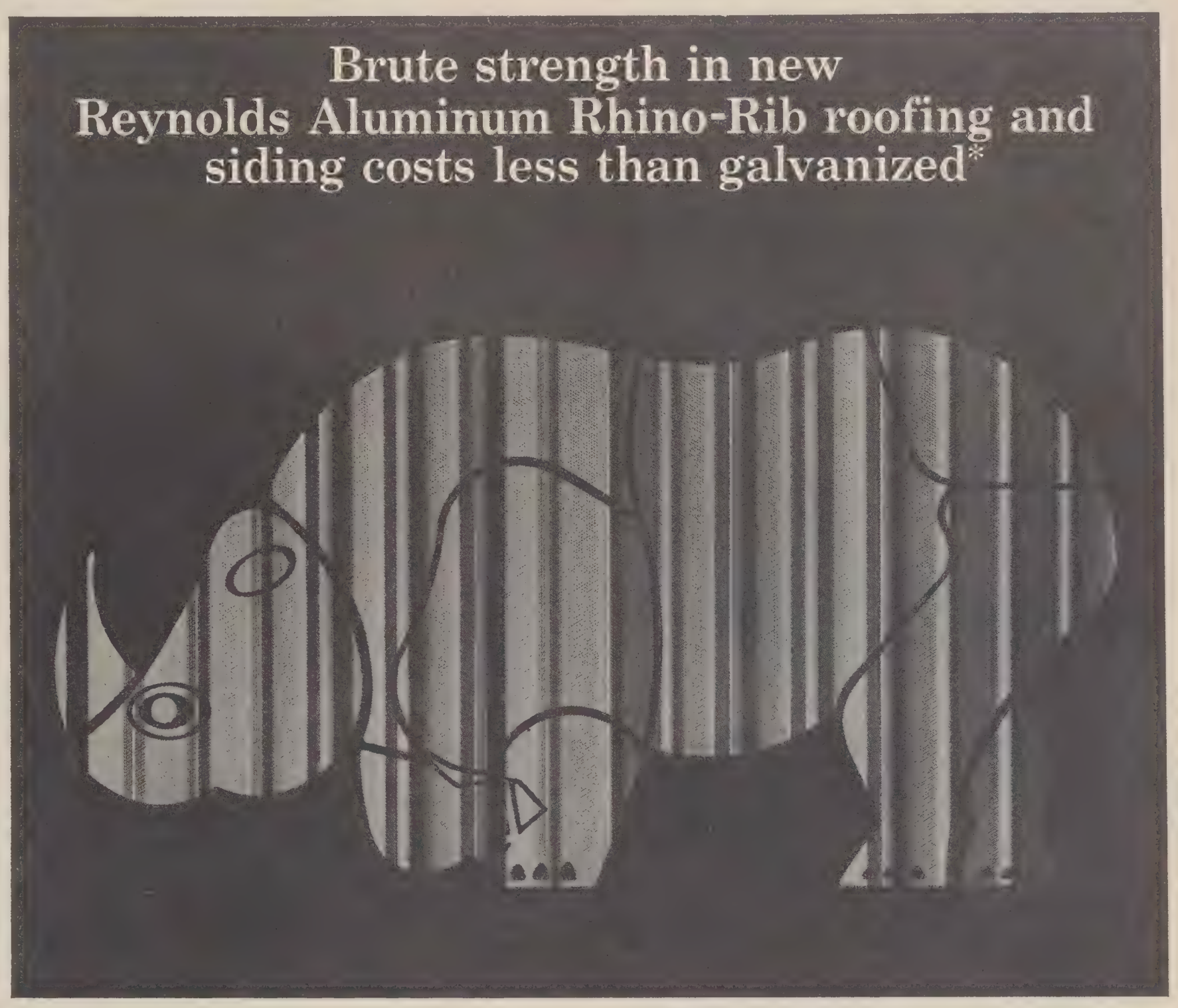
At this point in history, we should remember the depression years. I saw them both in Wisconsin and in New York City. I was present when conservative, well-meaning farmers drove sheriffs and bank representatives off farms with pitchforks to prevent foreclosures. I saw hungry people line up for blocks to get a bowl of soup. Millions were unemployed and homeless. How can we, in the midst of the greatest affluence the world has ever known, fail to solve today's problems of poverty? We can and will solve them.

A further comment on the university situation ... there can be no question that the pursuit of higher and higher academic degrees and the "publish or perish" concept in faculties has reduced the teaching of students, in many instances, to an onerous burden placed upon pretentious and indifferent professors. Obviously the SDS group is a group of irresponsible fools, but they capitalized on a lack of belief in the institution on the part of most of the students and faculty. Is there not a lesson for us in the fact that, in our universities, we tend to go off like firecrackers in many places and many ways ... rather than wait and blow up in a really violent eruption ... such as occurred in France?

As I say, I am an optimist, and I am inclined to believe that, as an American, I have every reason to be so. — *L. B. Westcott, Rosement, New Jersey.*

Man Pass — A man pass around the end of a barnlot gate is a great timesaver. This one uses 2×6-inch planks for rails, with three posts set in the ground in a wedge shape. The gate is hooked to the free post in the center of the space.

Brute strength in new Reynolds Aluminum Rhino-Rib roofing and siding costs less than galvanized*



A new rugged rib shape for rigidity and strength.
The photo shows why Rhino-Rib is stronger. Sides of ribs are nearly vertical for strength. Ribs are ¾″ high—35% higher than most previous metal farm roofing and siding products. Stands up to heavier loads, adds overall strength to farm structures.

A super-alloy for durability and corrosion-resistance.
Check the improved bump, scuff, hail, and corrosion-resistance of Rhino-Rib. Puncture tests show it withstands 50% more impact than conventional aluminum farm roofing and siding. A marine alloy formulation increases resistance to corrosion.

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A fine hex embossing pattern gives Rhino-Rib a satiny, non-glare natural finish, but it comes in modern, long-lasting baked enamel finishes, too—Polar White, Mocha Tan, Hunter Red, Terrace Green, Ivy Green, and Dawn Blue.

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Your dealer or builder will tell you that lighter, larger panels (36″ or 48″ coverage widths, up to 30′ long) go up faster, reduce seams, overlaps, fastenings; span purlins up to 36″ o.c. There's also a complete back-up of accessory products, including Ever-Grip screw fasteners, Rhino-Liner interior liner panels.

***Rhino-Rib cost claim proved by comparison.**
Based on a typical farm structure, a 40′x60′x12′ machine shed, open on one side, Rhino-Rib is lower in material cost, in delivery, even in installation ... as compared to 29 gauge, 2½″ corrugated, galvanized steel. Actual estimate of comparative costs available on request.

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PORTABLE GRINDER-MIXERS

by Wes Thomas

PORTABLE MIXERS and grinders are becoming an increasingly-popular method for on-the-farm preparation of feed. These portable units are the latest in a four-stage evolution in equipment for feed preparation. Stationary mills were first, then came portable mills, followed by attachment-conversion of auger wagons. Now several feed-preparation jobs are combined into the one portable grinder-mixer unit.

These machines are usually trailer-mounted, tractor-drawn, and pto-powered. The typical grinder-mixer, in addition to the grinding unit and mixing tank, includes a swinging feeder elevator and one or more unloading conveyors. In many cases a hopper for adding supplement and pre-mix ingredients is also included.

Type of Mill – The grinding mill may be of the hammer, roller, burr, knife, or cutting-plate type. Hammer mills are the most popular. They can handle hay as well as grain . . . but the other types produce a more-uniform granular type of mixture.

Type of Mixer – There are three basic arrangements . . . vertical mixer, horizontal batch mixer, and auger wagon.

The vertical mixers have a cylindrical shape, usually about 5 feet in diameter, with an inverted-cone shape lower portion. A vertical auger (which is usually enclosed) lifts material from the bottom of the cone to the top of the mixing chamber. Here the material is thrown by centrifugal force and spread over the top of the batch of material in the mixer. Thus, the auger produces a pattern of motion within the feed in which it moves up through the center of the mixer, is thrown to the outside, and moves down to be recirculated by the auger. Special variation in these augers include such features as flightings to help fill the auger and fingers to prevent ridging.

Horizontal batch mixers have a U-shape trough mixing chamber and a horizontal shaft with blade-type paddle agitators which stir the entire contents of the mixing chamber. Power requirements for the horizontal batch mixer are higher than for vertical mixers. However, the horizontal batch mixer can handle liquid molasses and silage, which the vertical mixer cannot do.

Auger-wagon mixers are essentially modifications of the basic V-bottom, tank-type auger wagons. A horizontal tank auger provides the basic mixing action. In most cases, the vertical unloading auger can be arranged to return the feed mixture to the top of the load. Thus the feed can be mixed by agitation, recirculation, or a combination of the two. In addition, the unloading process itself produces further mixing action. These units can also handle liquid molasses and silage.

Feed Arrangements—Methods for getting material into the grinding unit include the conventional gravity feed table, fixed location elevator, or swinging feeder elevator. These feeders may be either augers or chain-slat conveyors.

The swinging feeder elevator often permits more convenient setting-up of the equipment.

(Continued on page 41)

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If you grow vegetables, weeds should be the least of your worries.

Just use Dacthal, the worry-free weed preventer. It gives you dependable preemerge kill of grasses and important broadleaf weeds. And it's cleared for more crops than any other herbicide. Equally important, Dacthal controls weeds without injuring your crops. It's gentle — especially to those vegetables that can be touchy about certain herbicides.

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Weeds? They can be the least of your worries, with Dacthal weed killer working for you. From Diamond Shamrock Chemical Company, Biochemicals Division, 300 Union Commerce Bldg., Cleveland, Ohio 44115. A unit of Diamond Shamrock Corporation.

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Dacthal® worry-free weed control

GRINDER-MIXERS

Advantages

Combines feed-grinding, mixing, and transporting into one operation.

Completely portable. Can service dispersed storage and feeding areas; can be taken to another farm if you move.

Existing tractor power can be used; relatively-high output rate.

Well adapted to fence line feeding.

Feed is ground fresh at each feeding.

Disadvantages

Typical units are relatively expensive.

Use of tractor to power the unit can keep it from other farm jobs.

Feed processing can't be switched to slack-labor periods as with stationary tractor-powered mill.

Complete unit is heavy; requires solid footing in bad weather.

Breakdown of one component can tie up entire processing and distribution system.

Weighting or measuring ingredients must be done as a separate task.

Mixer . . . . .

(Continued from page 40)

These elevators range in length from 5 to 10 feet, and swivel through an arc up to 200 degrees. In addition to the usual manual operation, hydraulic control is available in some cases.

Supplement Hopper — A separate hopper which permits special concentrate to be added to the mixture without running it through the grinder helps avoid the risk of supplement damage from the heat of grind.

Unloaders — a variety of arrangements, which use from 1 up to 5 augers, are available for unloading.

The horizontal-type units include auger unloading systems similar to those on auger wagons . . . a rigid unloading auger with a short lateral or boom-type auger, or an arrangement which pivots left or right from the bottom of the wagon.

The vertical units include a system which receives material from a short tank-unloading auger. The main auger, which pivots from the point of material collection, ranges up to 10 or 12 feet in length. Another type swivels at two points and is crank-operated.

In most cases, the unloading conveyor system is located at the left rear corner of the machine.

Flotation — Since these machines usually weigh 1 to 1½ tons in addition to approximately 2 tons of feed, flotation is an important factor. Both single and tandem axle versions are available.

Power Requirements — About 40 horsepower is required to operate most units. In some cases, however, the larger units may require up to 60 pto horsepower.

The amount of feed processing required to justify on-the-farm equpment depends on many factors. Although these factors thus produce a different number for different situations, agricultural economists indicate that in many cases an annual volume of about 125 tons is the typical "break even" point. If you use less feed than this per year it's more economical to have the feed processed by custom operators. If you use more than this, on-the-farm processing offers the possibility of greater economy.

In terms of livestock feed, 125 tons of complete feed provide the annual rations for the following:

Hogs — 300 raised to 220 lb. (including feed for breeding herd); or 410 if bought at 30 lb. and fed to 220 lb.

Dairy Cows — 42 and their herd replacements.

Steer Calves — 66 for corn and supplement ration, when fed in drylot without silage from 425 to 1025 lb. If they are fed on corn silage, 71 head.

Yearling Steers — 90 for their corn and supplement ration, when fed in lot without silage from a weight of 700 to 1100 lb. or 100 head, if they are also fed corn silage.

GROUP FEEDING

The DeGolyer Brothers, who operate a 230-cow dairy farm near Castile, New York, feed no grain in their double-six herringbone milking parlor. Grain is blended with corn silage . . . no hay is fed . . . and the cows receive varying amounts according to production level.

The herd is divided into four groups, with grain per cow per day as follows:

1. Cows fresh one month, and cows producing 64 pounds of milk or more per day . . . 32 pounds of a high-energy concentrate containing 24 percent crude protein (CP).
2. From 53 to 63 pounds of milk daily . . . 25 pounds of a 24-percent-protein ration.
3. Producers of 38 to 53 pounds get an average of 14 pounds per cow per day of a 28-percent-CP grain mix.
4. Cows producing less than 38 pounds of milk daily get 6 pounds of a 40-percent-CP ration.

The exact division point between groups varies from month to month, depending on the overall herd production level. Cows are reassigned to groups at monthly intervals, or more often in the fall when many cows are calving.

Grain at Reylog Farm is metered into the corn silage on its way along augers to the feed bunks.

"That's the drawback on dwarf trees. They're easier to spray, prune and reach the fruit to get sick on!"

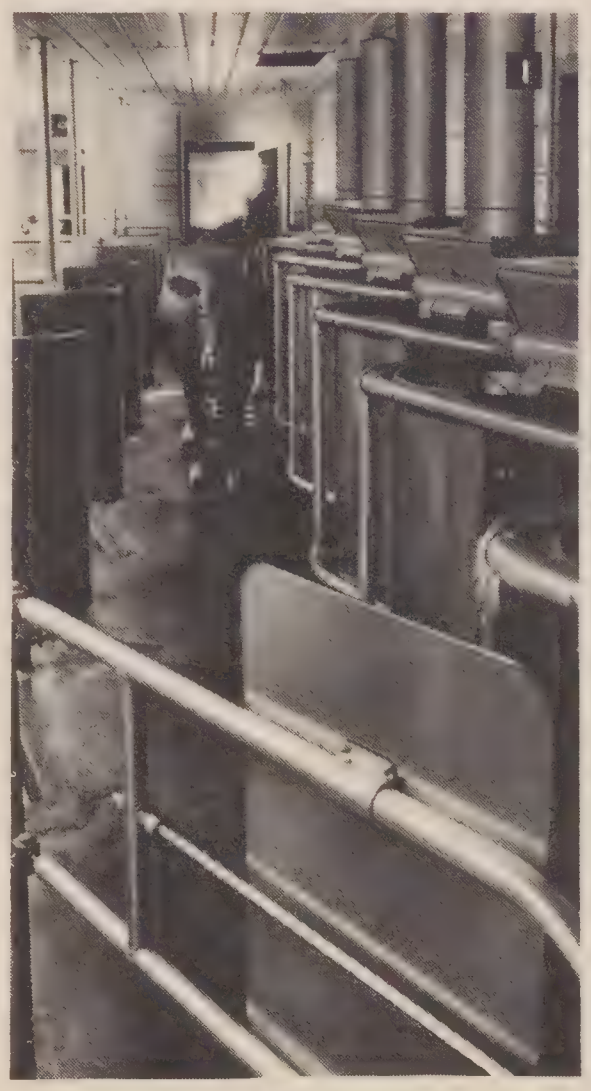
He's saving the labor of two men...with a new Surge Sawtooth Parlor

Check the record. The first herd of over 100 cows in Michigan to average over 600 pounds of fat on DHIA . . . the fourth highest producing Guernsey herd of over 75 cows in the United States . . . serves on the Board of Directors of the American Guernsey Cattle Club . . . is a past member of the Michigan Mastitis Council . . . was a judge of the National Guernsey Show at the 1968 North American Dairy Show in Columbus, Ohio. The record tells you Jim Fish, Hickory Corners, Michigan is a top dairyman and top manager.

The Fish herd was started in 1923. He used Surge Bucket Milkers with a transfer system for the last 15 years. When his herd reached 100 milk cows it took 4 men, working in two shifts to do the milking. Now with his new Surge Sawtooth Herringbone Milking Parlor, two men milk the entire herd in 2½ hours . . . and that includes clean-up time.

When Jim Fish decided on a new milking parlor five years ago, he and Mrs. Fish started visiting dairy farms to look at different parlors. After careful comparison Mr. Fish decided on a Surge Milking Parlor with the New Sawtooth Stalls. He reports, "This Surge Milking Parlor is even better than I expected. It takes less than half the time to milk. And, we can give the individual cows more attention."

A new milking parlor with Surge Sawtooth Herringbone Stalls will probably reduce your labor costs and increase profits too. Why not talk to your local Surge Dealer today. He can help you plan a new parlor system . . . offer you expert installation . . . and arrange financing.



1 Handle cows in groups. Design positions cows positively. Stainless steel rear shields and mangers clean easy . . . won't rust.

2 The Fish herd is housed in two free stall barns. All the roughage is fed in a covered bunk that joins the two barns.

3 Surge Sawtooth Stalls equipped with Lo-Profile Breaker Cups. Big, four foot work area makes it easy to prep the cow and put on the milker.

SURGE BABSON BROS. CO., OAK BROOK, ILLINOIS
BABSON BROS. CO., (Canada) LTD., PORT CREDIT, ONTARIO

DOC METTLER COMMENTS ON

The author is a practicing veterinarian at Copake Falls, New York

HORSE SLEEPING SICKNESS

May is a great month for the horse owner. The temperature is just right for riding, and they have the whole wonderful summer to look forward to.

A pleasure horse owner planning for summer has lots of things to do, such as cleaning and repairing tack, fixing fence if he has pasture, and attending club meetings to plan for trail rides and shows. While you are doing all these things plan ahead a little for your horses' health.

Last fall equine encephalomyelitis, or horse sleeping sickness, spread into the New Jersey area, and there was halted by winter. Since mosquitoes spread encephalomyelitis, as soon as warm weather starts we might see it spread farther north into New York and New England. It probably will be a good idea right now this month to have your more valuable horses given encephalomyelitis vaccine. If they were given it last year, one injection will be enough; if they haven't had the vaccine at all, or in several years, two injections, two weeks apart, are advised.

Prevention

The prevention of sleeping sickness in horses is a simple matter, but the disease itself is not. The fact that it can affect humans, and that horses can be falsely blamed for the disease in humans, make it imperative that every horse owner become informed about it.

Equine encephalomyelitis is a virus disease that affects horses, certain birds, man, and perhaps some other warm-blooded animals. It is spread by mosquitoes from bird to horse, bird to bird, and bird to human. Recent research has shown that it will not spread from horse to man, or horse to horse. Remember this important fact.

If you keep horses in a populated area and there is an outbreak of equine encephalomyelitis in which a human case is discovered, you may be accused of having horses that bear disease that could spread to humans. **This cannot happen.** The source of the disease is most apt to be a pheasant, but could be a duck or other bird . . . it will not be a horse.

The virus is believed to increase in the mosquitoes so that a mosquito biting an infected bird and then biting a horse can carry a larger amount of virus several days after he bites the bird than he did right after the original bite.

Symptoms

Horses affected with sleeping sickness become feverish, uncoordinated, and sleepy. They eventually go down and die. Treatment with antibiotics is of no value. However, supportive treatment such as feeding water with a stomach tube may help.

Sleeping sickness may be confused with other fever-producing diseases in horses, particularly swamp fever (infectious equine anemia). Swamp fever seldom becomes fatal as rapidly as sleeping sickness, and the animal is usually only weak, not incoordinate. In June I shall discuss swamp fever because it, too, is a disease all horse owners should be aware of.

I hope you will enjoy your summer, and have many happy relaxing hours with your horses. Call your veterinarian today and make arrangements to have your horses vaccinated against sleeping sickness so you can be a little more carefree when mosquito season starts.

FIREARMS FACT PACK

Many sportsmen find, when confronted with the task of contacting their legislators on firearms bills, that they are limited in their knowledge of the subject in relation to the nation's crime rate. A booklet is now available to help sportsmen in both situations. Titled, "The Fact Pack," it consists of seven documented studies, represents the most basic research ever made on firearms and crime, and uses the FI as its principal source of statistics.

When all the statistics are exposed, they show that fewer people owning fewer guns does not mean less crime, as proponents of strict gun controls would have everyone believe. Copies of the booklet may be obtained for $1.00 per copy from the National Shooting Sports Foundation, 1075 Post Road, Riverside, Conn. 06878.

the first six reasons to put DION to work handling forage on your farm

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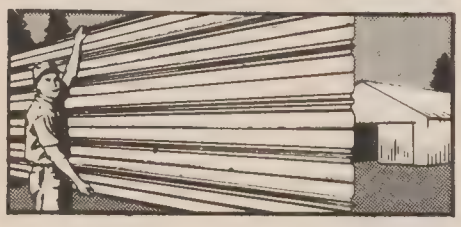

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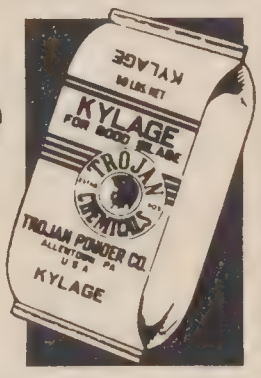

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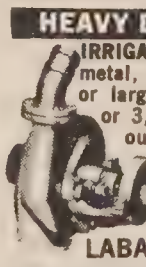

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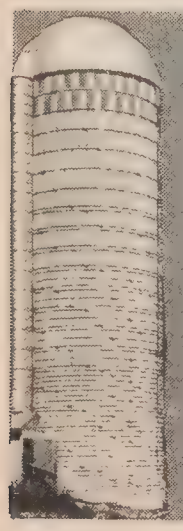

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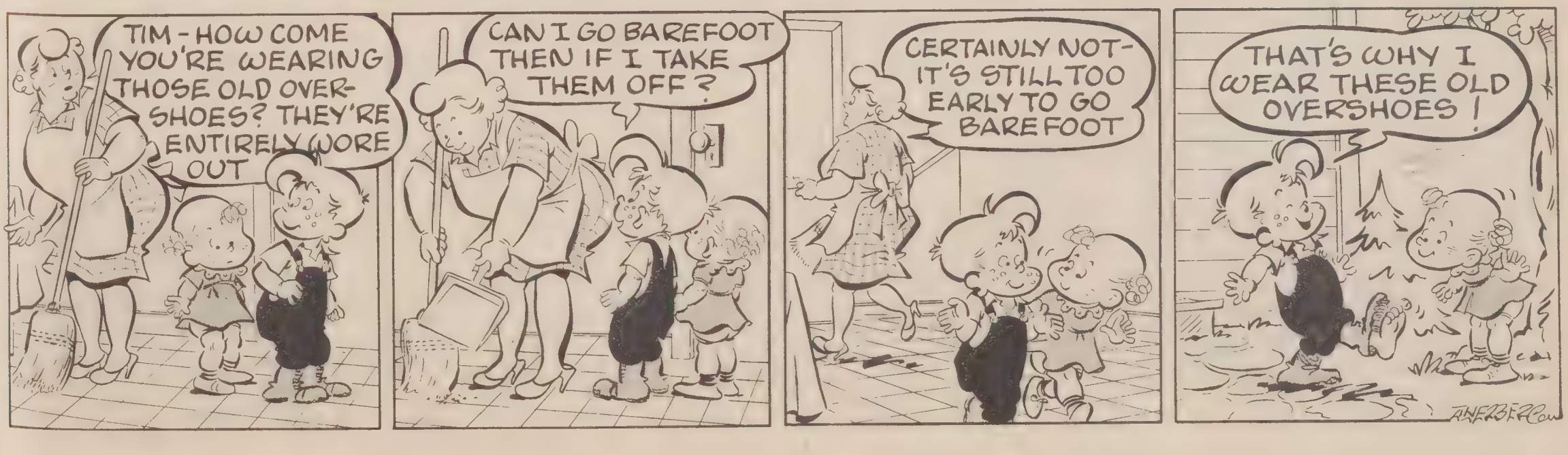

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CERTIFIED STRAWBERRY PLANTS: Surecrop; Catskill; Armore; Fairfax; Sparkle $4.95—100. Ozark Beauty Everbearing $5.95—100. Postpaid. Perkins Berry Farm, RD#1, Box 230, Hudson Falls, New York.

STRAWBERRY PLANTS — state inspected, ready to set from virus free stock. Howard, Premier, Catskill, Sparkle, Surecrop. Also Maine 55. 100-$4.00; 500-$14.00; 1,000-$23.00. Postpaid. Gem Everbearing 100-$6.00. Telephone 948-5341. Adrian Sidelinger, Burnham, Maine 04922.

SPARROW TRAPS

SPARROWS EAT PROFITS! Get new, improved trap. Guaranteed satisfaction. Free particulars. Roy Vail, Antwerp 10, Ohio 45813.

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"TOBACCO"! Chewing or smoking. 2½ pounds $2.00 Postpaid. Guaranteed. Fred Stoker, Dresden, Tennessee 38225.

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TRUCK * FARM * CAR—Used Tires—Excellent #1—650x16 6 ply $8.50; 700x16 6 ply $10.00; 750x16 8 ply $12.00; 900x16 8 ply $15.00; 750x20 8 ply $15.00; 825x20 10 ply $20.00; 900x20 10 ply $20.00; 1000x20 12 ply $25.00. Pick-up truck specials. New Major Brand. 700-14 6 ply Fst. Hwy. Tbls. $22.50; 670x15 6 ply Hwy. Tbls. Sec. $19.75; 700x15 6 ply Hwy. 1st $22.50; 700x15 8 ply Hwy. 1st $26.50; 600x16 6 ply Hwy. 1st $17.50; 650x16 6 ply Goodyear Hwy. Tbls. $20.75; 650x16 6 ply Gen'l. Hwy. Sec. $25.00; 700x16 6 ply U.S. Hwy. Sec. $22.50; 700x16 6 ply Gen'l. Hwy. 1st $28.50; 750x16 6 ply U.S. traction 1st $29.50; 750x16 10 ply Hwy. 1st $35.00; 700x17 8 ply Gen'l. Hwy. 1st $32.50; 700x17 6 ply Traction 1st $24.00; 750x17 8 ply Goodyear Hwy. $37.50; 750x17 8 ply Fst. traction $42.50; 700x18 8 ply U.S. Hwy. Sec. $28.50. Farm Tire Specialist-Airplane Conversion, New Truck-Tractor Tires also available. Write for complete list. Send check or money order. Sorry no C.O.D.'s. Gans Tire, 1001 Broadway, Chelsea, Mass. Tel: 889-2035. Area Code 617.

TRAVEL

ONE OF OUR most popular services to readers is sponsoring and arranging tours and cruises. They are popular because the worries about foreign customs, handling baggage, value of foreign money, language barriers, tickets, reservations, etc., can be forgotten. Trained, experienced escorts take care of everything for you—even tipping. For details on our future tours, write American Agriculturist Tours, Box 370, Ithaca, N.Y. 14850.

FLORIDA KEYS FUN motel and marina on 50 sunny acres. Houseboat Rentals. Write for brochure. Plantation Harbor Motel, Box 26N, Islamorada, Florida 33036.

TRAPPING

ALL ILLUSTRATED Fox and Coyote trapping methods. Free circular. Jack Nichols, Carmel, New York 10512.

WANTED TO BUY

PRESIDENTIAL POLITICAL ITEMS bought. Elmer Piercy, Box 666, Victorville, Calif. 92392.

COLLEGE LIBRARY seeks to buy old family letters dating before Civil War. Groups of letters by one person or several generations are wanted. Letters should describe the area, politics, internal improvements, religious enthusiasms, anti-slavery sentiment, military actions, or such. Best prices will be paid in confidential negotiation. Reply Box 369-SL, Ithaca, N. Y. 14850.

WANTED — OLD CELLULOID, Pin-back buttons—advertising, humorous and especially political. Any other, "For President" items—ribbons, badges, tokens, paper items, banners, etc. Accumulations or one. Describe and price or ship for quote. Ben H. Corning, 10 Lilian Rd. Ext., Framingham, Mass. 01701.

WATCHES WANTED—Jewelry, Dental Gold, spectacles, silver. Prompt remittance. Satisfaction guaranteed. Lowe's, Holland Bldg., St. Louis, Mo. 63101.

OLD WATCHES, COINS, Banjo, silverware, bells, banks, shaving mugs. Simms, Warwick, N. Y. 10990.

OLD STERLING SILVER: any condition: Diamonds, Gold, Platinum. Sell now. We pay immediately highest prices in history. Ship insured parcel post Concord Silversmiths, Salisbury Road, Lakeville, Conn. 06039. Reference National Iron Bank, Falls Village, Conn. Phone anytime 203-435-2322.

WOMENS INTEREST

RAISE RABBITS for us on $500 month plan. Free details. White's Rabbitry, Mt. Vernon, Ohio 43050.

WALLPAPER—SAVE HALF or more. Huge 1969-70 catalog, over 80 selections 21¢ to 69¢ single roll—send 10¢. Mutual Wallpaper, Dept. R, 228 West Market, Louisville, Ky. 40202.

$500-$800 MONTHLY. Raise small laboratory-breeding stock for us. We supply equipment, breeders, instructions. Illinois Research Farms, Dept. AAC-5, McHenry, Illinois 60050.

SEWING SUPPLIES at Discount Prices. Save to 50% on hundreds of items. Large catalog 25¢. Newark Dressmaker Supply Co., Dept. 500, 140 Halsey Street, Newark, New Jersey.

BEAUTIFUL JEWELED ITEMS—Wholesale—Catalog 50¢ (Refundable). Special clip earrings or 14K post—3 pairs $7.50—$15.95 value. Satisfaction or money refunded. Established 20 years. Whaley, Box 98, Patchogue, New York.

WEAVE RUGS — make good profits — No experience necessary. Free catalog, sample card, and low prices on carpet warp, rug filler, looms, parts, inexpensive beam counter. If you have loom—advise make, weaving width please. Or. Rug Company, Dept. 3954, Lima, Ohio 45802.

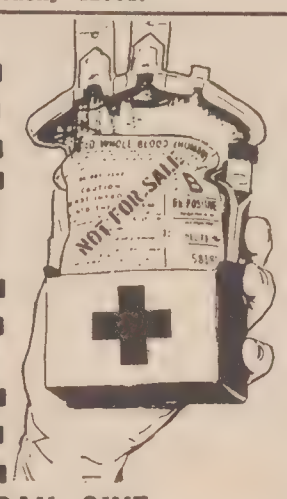
SEVEN GORGEOUS FLOWERING CACTUS, including beautiful Gold Ball $1.00 postpaid. Free—rare plant for promptness. Cactus-Island, Endinburg, Texas 78539.

LETTER SEALS! Brighten your correspondence with clever and thoughtful verses! Catalog—samples 10¢. Rose, Box 402F, Burlington, Iowa 52601.

SHEEP FLEECES exchanged for yarns. Information. Bartlettyarns, Harmony 1, Maine.

FRUIT JARS — 50¢ — $100.00. Send $1.00 Complete Buy-Sell List. Refundable. Schroeders, Paducah, Kentucky 42001.

THE GIFT OF LIFE



ONLY YOU CAN GIVE.
RED CROSS BLOOD PROGRAM.

With Our ADVERTISERS

One-lever operation of a simple hydrostatic drive is the big feature of the new Model 1255 hay windrower just introduced by J.I. Case Company. The 1255's one-lever hydrostatic control starts, steers, brakes, stops, reverses, and has infinitely variable speeds. Also, hydrostatic drive eliminates belts, chains, sheaves, sprockets, bearings, shafts and other parts, thereby reducing maintenance.

The windrower is described in a 12-page booklet now available from Case branches, dealers, or by writing to J.I. Case Company, Racine, Wisconsin.

International Harvester Company has announced the availability of a Magnetic Pulse Transistor Ignition for eight models of its farm and industrial wheel tractors with gasoline and LP gas engine in the 50 hp or more class . . . a "first" in farm tractor design. Engines so equipped, the company said, provide continuous maximum operating voltage, and once the engine timing is set it remains the same over the entire life of the unit. There are no distributor points to set or replace and no retiming required.

The latest of the H. K. Webster Company's Satellite feed mills is now in operation at Maybrook, New York. The new mill is the sixth to be constructed by the H. K. Webster Company in the past five years and the second in New York State. A year ago the first dairy feed Satellite mill was opened at Chatham, New York. The first four mills, all poultry feed plants, are located in New England: at Livermore Falls and Rockland, Maine; Lawrence, Massachusetts; and Wauregan, Connecticut.

HOMETOWN FIRST CLASS MAIL

Be it fable, fiction, or fact, the English sparrow is assumed by many to have been brought to our land for one specific purpose. The little fellow was expected to dispose of those telltale monuments to the indiscriminate, unpredictable bodily function of the horse.

If that be so, it must have to rate among the greatest miscalculations of mankind!

March heralds another season of nature activity in this area. English sparrows don't waste a moment, they start practicing nest building with ever-increasing enthusiasm! In March I see them sorting feathers. This will last until September. By then they must be masters of the trade.

I suspect that we sorely underestimate the millstone these little rascals hang around our necks. Sociably, they are a pain in the neck and a burden to the ears. They are the most efficient users of personal filth in all the land. They can contrive, without any train whatever, more damage to garnered grain and feed stored in burlap bags . . . as well as foul up stored machinery beyond reckoning!

There is one simple program which will almost entirely eliminate the English sparrow population on any farm. No poison, no shooting, no scare tactics . . . simply eliminate the nests. Because of their nesting habits this is comparatively easy.

They are not fussy. They will build a nest anywhere a nest can be built. Usually the nests can be reached without a ladder; just a short pole will do the job. The success of the program depends very heavily upon timing.

Knock Nests

A regular program of destruction should begin as soon as the first nests have their complement of eggs. Destroy the nests **after** the eggs have been laid and **before** they have hatched. A ten-day interval between tours will be most effective . . . too frequent is a waste of time. A longer interval will miss skipped nests and young birds will add to the population. There will be some misses anyway . . . just keep that percentage low.

Another characteristic of these birds is their high death rate from September to March. I suspect that only a very small percentage live through two winters. I know that the old birds begin to die off in late summer. This is a break for our program of control.

Three Years

We have completed our third year of destruction control. Before we launched the program in desperation, we had literally clouds of sparrows. Today we still have a sprinkling of them.

It is a pleasure to go about farm work and not have to brush off and clean off filth. Sacks of stored feed are not pecked open; machinery is still showing solid colors.

It is almost impossible to effect sparrow-tight buildings on an operative farm. They seem to be able to squeeze in where a thin mouse would have trouble. Wherever there is a feeder for livestock, poultry, or other, they will find it . . . and how they can scratch!

Destroy the nests and control the sparrows!—*G.P. Rhodes, Clarence Center, N.Y.*

HILDA

We had a German shorthair
Of highest pedigree
One would know she was a queen
By manners and gentility.

She wasn't just a smelly dog
To have around the place,
But a fine well-trained hunter
With such a kindly face.

She wouldn't hunt for everyone . . .
Just her master, Bob;
Some tried . . . she'd sit close by his side
With a reproving nod.

She seemed to sense his every mood
And wait for a word from him,
The joy educed with Bob around
One could never dim.

I never saw a love like hers,
And the bond between those two
Was something among us humans
Shared by far too few.

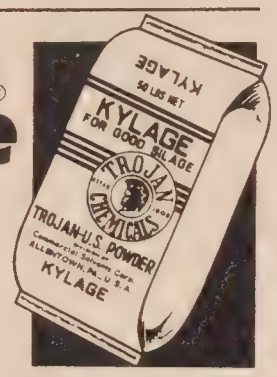
Then one day, just as she lived,
With quiet dignity,
A parting look into her master's face
She left us silently.

If God had a heaven for dogs
You'd find her there, I know;
For Hilda was a saintly dog,
Saintly as dogs go.

— M.J.M.

Kylage®

puts silage on a par with green grass



Kylage helps produce better silage from all forage crops—wilted or not. It prevents spoilage—drives out trapped air—stops bad odors. Nothing works better—easier to use. With Kylage, the cost is so small, the results so certain, you can't afford to risk your silage crop. FREE booklet. Ask for Kylage at your farm supply store, or Agway outlet.

Trojan • U. S. Powder, Div. Commercial Solvents Corp., Chemical Dept. 17 No. 7th St., Allentown, Pa. 18105

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SAVE 75% OF ORIGINAL COST

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Lined twill jackets—36-42	3.09
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Add 90¢ for postage and handling. No. C.O.D. All sizes. Colors—Tan, Gray, Blue, Green. Used. Professionally laundered. Satisfaction guaranteed. N. Y. State add 3% tax.

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Sample FREE to Official.

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Established 1915

KOOLS K104 SILAGE DIVIDER

PAT. #3,321,252

A silage divider that really works! Installs on standard 9" pipe. Simple design with no electric motors or any moving parts. Puts silage in 3 piles inside silo. Even distribution gives improved compaction with more silage in silo and smoother unloader operation. One size fits all silos. The K104 is another fine Kools product.

J. S. WOODHOUSE CO., INC. AA-59
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☐ Please send name of nearest KOOLS dealer. ☐ Student.

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- Lexington
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- Salem
- And Many Others

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- Wiggins Tavern
- Tavern on the Green
- Sheraton Eastland
- Longfellow's Wayside Inn
- Seafood Dinner at Anthony's Pier 4

All this and more with the flaming background beauty of Indian Summer in New England. Yours for years of memories.

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YEAST BREAD CONTEST PRIZES!!!

by Augusta Chapman, Home Editor

WHO SAYS that women don't know how to bake bread any more? Any doubters should come to one of the hundreds of bread-baking contests that are now being held throughout New York State by Subordinate and Pomona Granges. These are the local elimination matches in connection with the 34th annual bake-off sponsored jointly by State Grange and American Agriculturist since 1933. The contest has been held every year since then except two years during World War II, and the list ofproducts baked by Grange members is long!

This year's bread contest began in January in the Subordinate Granges. Winners of these local contests are now moving up to county competitions, and the honor of being the first county winner goes to Mrs. Ford Harrison of Mt. Vision, New York, in Otsego County. She competed with thirteen other local winners in her county.

Mrs. Harrison is now eligible to compete in the state finals which will be held next fall when State Grange Session meets in Albany. At that time, 53 county winners will compete for the prizes shown on these two pages, plus cash awards.

Members of the Grange Committees on Women's Activities always tell me that our baking contest is one of the most popular features of their program, and we know this must be true from the thousands of Grangers who enter each year. We feel sure the contest's popularity is due in a large part to the exciting prizes awarded state winners. The sincere thanks and appreciation of both American Agriculturist and New York State Grange go to every company participating in our contest and helping to make it a success. Here are the prizes!

The top winners will receive **one** of the following grand prizes:

From **Agway, Inc.:** A Magic Chef Dishwasher, Model 140, which can be used either as a portable or a built-in, features roll-out racks to make loading simple and convenient.

From **Farmers and Traders Life Insurance Co.:** A 64-piece set of Syracuse China (service for 8) in "Wedding Ring" pattern.

From **International Milling Co., Inc.:** An Oster 10-speed "Cyclomatic" Blender. Set dial for number of cycles desired, select proper pushbutton speed, and blender operates automatically.

From **Monarch Range Company** (Beaver Dam, Wisconsin): Their "Jet-Fan" convection over 30-inch Electric Range, which bakes and roasts at least 25 per cent faster than ordinary ranges. Also featured is the new "Sta Klean" oven with removable teflon-coated sides and backs, plus a lift-up cook top, lift-off over door, and plug-in infinite controlled surface units.

From **National Grange Mutual Insurance Co.:** A 3-piece Coffee Service with 15-inch Round Tray of Community silverplate in "Park Lane" pattern.

From **New York State Grange** State Grange will again contribute two grand prizes to the contest, and next month we hope to tell you what these prizes will be.

From **Oneida Ltd. Silversmiths:** A 50-piece set (service for 8) of Oneida-Craft Deluxe Stainless in "Capistrano" pattern.

From **Syracuse China Corporation:** A 16-piece starter set of Calypso Casual China in "Mon

GRAND PRIZES

From MONARCH RANGE COMPANY: "Jet-Fan" Convection Oven Electric Range by MONARCH.

From ONEIDA, LTD. SILVERSMITHS: 50-piece set of Oneida-Craft Deluxe Stainless.

From AGWAY, INC.: Magic Chef Dishwasher.

From NATIONAL GRANGE MUTUAL INSURANCE CO.: 3-piece Coffee Service with Tray.

From SYRACUSE CHINA CORPORATION: 16-piece set Calypso Casual China.

From FARMERS AND TRADERS LIFE INSURANCE Co.: 64-piece set of Syracuse China.

ego" pattern.

Each of the 10 highest state winners will receive the following prizes:

Each of the 10 highest state winners will receive the following prizes:

From **Curtice-Burns, Inc.:** A case of Blue Boy vegetables in Curtice-Burns' "white plate" lined cans **and** a case of mixed products of Ritter Brand merchandise.

From **Dairymen's League Coop. Assn., Inc.:** A Cheddar Treasure Chest Dairylea Cheese Assortment.

From **International Salt Company:** 6 packages of Sterling Table Salt.

From **Revere Copper and Brass Incorporated:** A 1-quart Revere Ware Saucepan with cover.

From **Standard Brands Incorporated:** A Gift Package containing many Standard Brands products.

Other contest prizes, including cash awards, are as follows:

From **International Milling Co., Inc.:** A copy of their "Let's Bake" cookbook and coupon for a 5-lb. bag of Robin Hood flour to each of the 53 county winners.

From **International Salt Company:** As a bonus prize to the No. 1 state winner, a 4-quart family size Electric Corn Popper by West Bend.

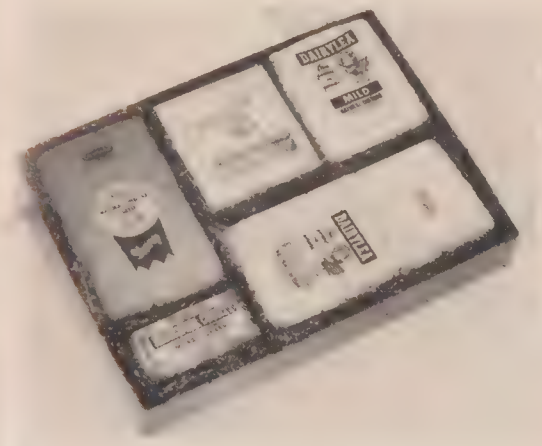
New York State Grange will again award $159 in entry prizes. Each of the 53 county winners taking part in the state contest will receive a $3 entry prize.

American Agriculturist will distribute $107 among the 25 top winners as follows: First prize, $20; second, $15; third, $11; fourth, $8; fifth, $6; sixth, $5; 7th through 10th, $3 each, and $2 each to winners 11th through 25th.

As soon as the list of county winners is complete, we will print their names; also our December issue will feature a story of the state finals with pictures of all winners present at State Grange Session.

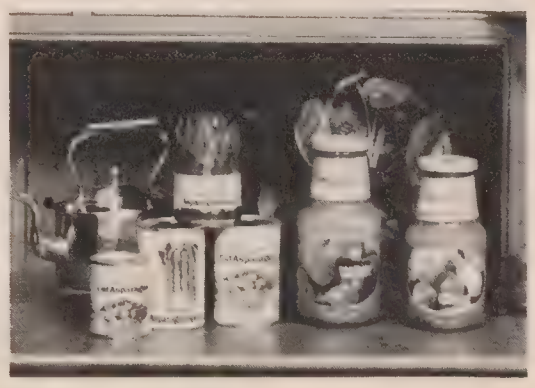
From STANDARD BRANDS INCORPORATED: A Gift Package containing many Standard Brands products.

From INTERNATIONAL SALT COMPANY: 6 packages Sterling Salt.



From DAIRYMEN'S LEAGUE COOP. ASSN., INC.: Treasure Chest Dairylea Cheese assortment.

From REVERE COPPER AND BRASS INC.: 1-quart-Revere Ware saucepan.



From CURTICE-BURNS, Inc.: A case of Blue Boy vegetables and a case of Ritter merchandise.

Sure, You've Dreamed About...

Spanish Main, Gulf Stream, warm tropical waters, Incas, Panama Canal, Conquistadors, Andes Mountains, the Strait of Magellan, Montevideo, Buenos Aires, Rio de Janeiro, Gauchos of Argentina, Barbados, Sugar Loaf Mountain, Brasilia, Copacabana Beach, St. Thomas, San Juan, Puerto Rico, etc. . .

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But only 74 friendly AA folks can go; we've reserved just 37 cabins (two persons per).

You can be one of the lucky ones who'll have this month and a half trip – Springtime in South America – to remember the rest of your life. Send for the free brochure.

October 25 – December 11, 1969

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JOURNEY TO DAY BEFORE YESTERDAY

by E. R. EASTMAN

Almost everyone likes to remember the experiences and fun that they had when life was "young and gay." And young people enjoy reading about the adventures . . . and misadventures . . . of Grandpa and Grandma in the Horse and Buggy Days, so well described in "Journey to Day Before Yesterday."

A copy of this well-bound book, illustrated with many old-time pictures, can be had by sending check or money order for $7.30 (New York State tax included) to American Agriculturist, Book Department, Box 370, Ithaca, New York 14850.

For the Farm & Rural Home Bookshelf

We have arranged with the publishers to supply directly to our readers, postpaid, any of the following books at the prices listed.

Books will be shipped direct from the publisher. Please allow 2 weeks for delivery.

Cattle *Crops* *Conservation* *Horses*
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VISITING

with

Home Editor Augusta Chapman

Coming home from a short stay in the hospital, a young friend of mine was horrified when her four-year-old announced, "Grandma let me have a piece of chocolate pie for breakfast!" Now I'll admit that we grandmothers grow a bit more tolerant with the years and once in a while **just might** let a grandchild get away with something we wouldn't have let our own children do, but this grandma was apparently quite up-to-date in her thinking!

Too often teen-agers and even grade school children skip breakfast entirely these days, so nutritionists with the U.S. Department of Agriculture advocate having something different for this important meal. They say that spaghetti with meat sauce, for instance, served with a glass of milk and perhaps a piece of fruit, is a pretty good way to start the day.

A teen-ager may think the regular breakfast menu needs jazzing up and might prefer a hamburger or frankfurter with all the trimmings to the more conventional cereal and eggs . . . and along with fruit juice and a glass of milk, this isn't a bad breakfast either. Your first-grader might like a peanut butter sandwich and a dish of last night's pudding. Here again, a child doesn't necessarily have to **drink** milk for breakfast; he could have it in pudding or even ice cream.

The usual and easiest way of getting Vitamin C is from citrus fruit or juice, but there are other ways of getting it. Your teen-ager would probably go for a big chunk of watermelon in the summer or for cole slaw with that hot dog, and both contain Vitamin C.

So it's all right to include foods your youngsters like for breakfast and to be off-beat and imaginative. They'll come to the table just to see what's new, and the most important thing is that they **do eat breakfast.**

Fashion Preview:
Spring through Summer

A return to feminine, closer-to-the-body clothes is the style for spring 1969, according to the experts at Du Pont, pioneers in developing many of the wonderful new fabrics we enjoy so much today. This more feminine mood will be complemented by pale, subtle colors, a trend to neutrals, and toned-down color combinations.

Newest in colors will be pale peach, apricot and coral. Also in the pale range, setting the feminine mood this spring, will be silvery grays, lilac, iris, and pinks and greens with a yellowish cast. Pale colors will be combined with neutrals rather than other pales. Semi-bright colors, but not as bright as last season's, will also be in vogue. The new medium brights will have a subtle quality. . . clear blues and greens and sunny yellows.

Spring colors will carry over into summer, perhaps going a little brighter. One of the biggest looks for summer will be the favorite red-white-blue combination, and it will be featured in every type of fabric.

Of course, traditional dark tones will be shown for "transition" apparel. Lineny browns, dark green, navy and red in sheer fabrics will be popular in summer-fall fashion.

Like color, there is a dramatic change in prints for spring. They're going feminine–small to medium florals, precisely drawn, and wallpaper stripes. Summing up, spring will mark a change from the bold, chic fashion of '67 and '68 to a soft, all-woman look.

Sewing Door

If you have a spare bedroom closet, one you don't need for clothes, turn it into a storage area for sewing supplies and equipment. It will make an ideal hide-away for all those little things you need in sewing.

For example, tapes, thread, patterns and scissors can be arranged on the back of the closet door. A few hooks, shelves and bins will hold them nicely –and put them within easy reach.

In the closet itself, install a four-drawer chest, or have the handyman around your house build these drawers to order–with lots of partitions for gismos and gadgets. Allow space above the drawers to store your portable sewing machine. For things you are making and clothing to be mended, add more shelves as space permits.

MEMORIAL TO A COOK

by Miriam Herwig

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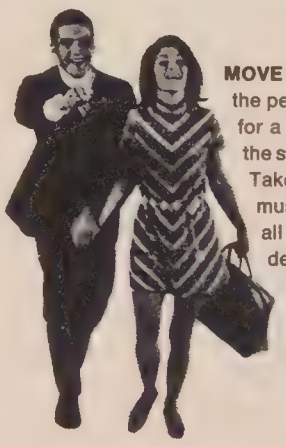

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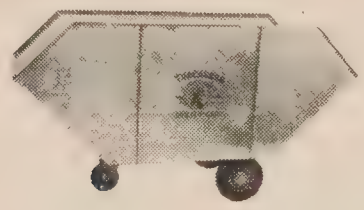

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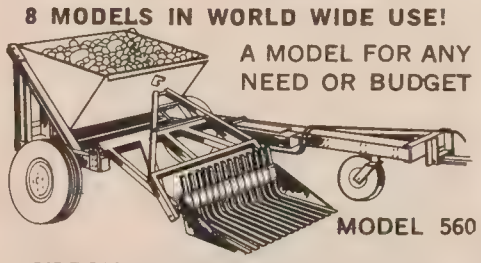

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WHY NOT GROW SOME HERBS?

by Nenetzin R. White

THE WAY TO grow herbs is to start! Read all you can on herbs, but don't feel that you have to begin with a complete collection in a nice formal pattern — just start. Many of the perennial herbs can be picked up at nurseries and garden centers, and most herb gardeners will be happy to give you a few sprigs of the common perennials. Later you may wish to buy a few of the more exotic ones. Also, get a few packets of annual herb seeds and plant where they are to stand — amid flowers, vegetables, or in any well-drained, sunny spot.

This may sound like reverse psychology because I usually stress planning, and this is our business. But on the practical side, I know how much enjoyment you will get from growing even two or three herbs. If you have room, I am sure that you will eventually put your herbs together in an orderly fashion. If you don't have room for a separate herb area, you will surely incorporate more of these delightful and very attractive plants in your borders.

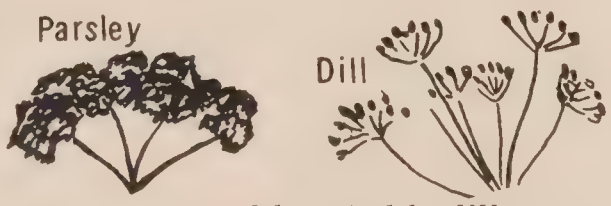
When you plant your herb seeds, prepare a small area carefully for each kind and work in a little peat. You will not want more than one-third to half a packet of seeds, so why not get together with a neighbor or friend who is also interested in growing a few herbs. You might not have success with one and if she does, you can swap a few plants. Generally speaking, however, it is better to plant annual

herbs where they are to stand and not transplant. They will need thinning and weeding, but should thrive with no additional care and give you lots of snipping through the summer and autumn.

It is important to place the taller growing herbs in the background. There is no need for me to list heights, etc., for you can read this on the packets, or in the case of perennials, your nurseryman or friendly giver can tell you the plant's expected height. I would rather tell you the many uses I have found for some of the more common herbs. If you know of or find additional uses for herbs, do pass on the information to me.

Of the mints, I find **spearmint** (perennial) the most versatile. The leaves are wonderful in iced or hot tea and in lemonade. Branches of this are great added to an herb brush, used to apply marinade or barbecue sauce to broiling meats. Snips of the leaves enhance a tossed salad, fruit salad, or fruit cup. The stems and leaves are used to make a mint sauce and the most delicious mint jelly you have ever tasted.

Dill — for pickles only? Oh no! Its uses are many and varied. Snips of the foliage or young seed heads make a green, chef's, or cottage cheese salad a gourmet dish. The flavor is great for

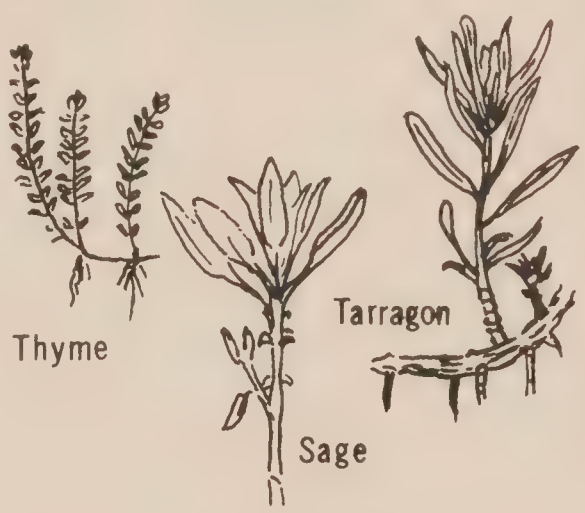


many vegetables (add dill the last five minutes of cooking), such as cabbage, green and yellow beans, or limas. Combine it with fresh or stewed tomatoes, potato salad, deviled eggs, beef stroganoff, or cheese sandwiches, and use dill snips on a cheese tray. Dill also combines well with chicken and fish, and use it in a mixed herb brush. Dill will often seed itself, so watch for young plants in the spring.

Thyme, summer savory, marjoram, sweet basil and sage all grow readily from seed. Sage should winter over and be good for two or three years. All of these are wonderful for herb brushes, in salads, with vegetables and soups, for stuffings in fish, poultry and pork. A few snips of basil on any spaghetti or tomato sauce will make you believe you're in Italy!

Chives are so common that they can often be found in a super market. They are not "lowly"; they're "heavenly," and a small clump will become larger each year and probably re-seed in the area. Use chives anywhere a light, onion-like touch is desired; it's a must for herb brushes.

All herbs are great for diets too. They can be used in place of salt, and you will hardly miss butter if you have some nice chopped herbs on your vegetables. I grow and use many other herbs, but could get along nicely with just a few of the common ones. **Tarragon** is the exception; I'd really hate to be without it. This plant doesn't grow from seed; you will have to get a friend to give you a



piece or buy some. And be sure to mulch it over the winter.

There are so many uses for tarragon — in sauces, mustard, mayonnaise, salads, and with fish, but best of all is tarragon vinegar. This is so easy to make you won't believe it! Here's all you do: Bring white vinegar to a boil. Crush stems and seeds of tarragon, using about six 6-inch sprigs to a quart jar (with or without garlic clove). Pour boiling vinegar over tarragon and cover jar. If using metal cover, line with piece of waxed paper.

Have fun growing some herbs this year!

DO YOU HAVE . . .

A recipe for Mulberry Jelly? **Miss Mary J. Wagner, 40 Main St., Esperance, N.Y.,** is eager to find one.

Recipe for Norwegian Julekazer (Christmas cake)? If so, would you share it with **Mrs. Lawrence Homer, West Cape Road, Stockton Springs, Maine 04981?**

Any old formula "Arm & Hammer Brand" washing soda, the kind that was on the market prior to 1960? **Maurice J. McNamara, 1292 Willowdale Ave., Alta Vista, Ottawa 8, Ontario,** is very anxious to get one or two boxes and guarantees to reimburse sender for cost plus postage.

A recipe for cake or cookies calling for pure glycerin or baking ammonia? This request comes from **Mrs. Veronica Taft, P.O. Box 54, Oswego, N. Y. 13126.**

A log cabin-shaped tin that Log Cabin Syrup came in a few years back? **Mrs. Lela Carpenter, Conklin, New York 13748,** would like one for her children.

A recipe for a "no-frost" white cake that when baked makes its own frosting on top? **Mrs. C. H. Bennett, Route 3, Auburn, N. Y. 13021,** had the recipe years ago but lost it.

WE APOLOGIZE!

In our April "What's Your Hobby?" column, the most important part of Mrs. Dwight Fairman's address was omitted. Following is a reprint of her hobby letter with the complete address.

Hobby Is Genealogy

My most absorbing hobby is genealogy. I have really had to dig for my **Elliston** line, which I have gotten back to John B. 1777. He was of Moreau, N.Y. in 1810 to 1830 and Wilton, N.Y. in 1850. His daughter Mary "m." James **Kelly** who was of Moreau in 1810 and 1830. Can anyone help me on these lines?—**Mrs. Dwight B. Fairman, 25 Coolidge Road, Springfield, Vermont.**

DUTCH ELM DISEASE

by Isa Liddell

DUTCH elm disease is the most important shade tree problem in New York State. It was first detected in the U.S. in 1930, and in New York State in 1933. In the early thirties both state and federal agencies initiated search and control studies in southeastern New York.

Much was learned about the beetles, and fungus and disease transmission, although attempts at eradication were unsuccessful. A control program initiated by the New York State Department of Agriculture & Markets proved inadequate and was terminated in 1957, leaving the responsibility up to municipalities and individual tree owners.

The disease is restricted to trees in the elm group, and characterized by disruption of normal water movement within trees, so that they wilt and die. It is caused by a fungus, which is spread to healthy elms by two species of elm bark beetles. The disease may also be transmitted from a diseased tree to an adjacent healthy one through roots which have become grafted together underground.

Once infected, individual trees cannot be cured, although resistant trees may tolerate infection and even recover.

Symptoms

The appearance of infected trees varies considerably according to the time of year. In June or July elms may show wilting or shriveling of the leaves and new twigs on one or more branches. During midsummer or later the symptoms are usually confined to a definite part of the tree, or even to a few twigs, the leaves curling and/or turning yellow to brown before falling. Trees showing these symptoms may die during the winter, or shortly after they begin to leaf out the next spring . . . although very large trees may live for several years after the first appearance of symptoms.

Elms are most susceptible from late May through early July. Elm bark beetles contaminated with spores of the Dutch elm disease fungus chew through the bark of twig crotches, trunks and branches of healthy elms, and in so doing deposit spores in the water-conducting vessels.

The fungus multiplies and spreads throughout the tree . . . and through root grafts to healthy trees.

As any part of a tree approaches death it becomes attractive to adult bark beetles which tunnel between the bark and wood, breed and lay eggs, thus providing for a new generation of beetles. These beetles become contaminated with spores. The new generation of adult bark beetles chews through the bark of healthy elms the next spring, introducing spores of the fungus into the wood and beginning the cycle anew.

Control

Control depends upon suppression of local populations of the elm bark beetles that carry the fungus. This is accomplished by destroying elm wood which is suitable for breeding and egg-laying activities. The objective is to eliminate potential sources of fungus-contaminated beetles within 700 feet of trees to be protected . . . the maximum distance beetles fly to feed on twigs and branches of healthy elms. Effective sanitation alone can keep Dutch elm disease losses in a community to less than 2 percent of the elm population per year.

There are also a number of supplementary measures that can be used in conjunction with sanitation to provide for increased protection of particularly valuable trees within areas covered by sanitation programs. Chief among these are control of bark beetles by insecticides (most effective when applied under good weather conditions during March and April . . . no later than when leaf buds break and leaves start to grow), and chemical killing of roots between diseased and healthy elms to prevent root-graft transmission of the disease.

Professor Wayne A. Sinclair of Cornell has an excellent bulletin on the subject, No. 1185, which can be obtained from the Mailing Room, College of Agriculture, Building 7, Research Park, Ithaca, N.Y. Single copies are free to residents of the State.

Also available is a Cornell Tree Pest Leaflet A-4 which is for the benefit of municipalities on Dutch elm disease. Perhaps your county agricultural agent will have copies of these, or you can get them direct from the Mailing Room.

This is the Bellinger Line Elm in the Town of Seward, Schoharie County, a victim of Dutch Elm Disease. In 1953 this 400-year-old tree was named the State's largest by the State Arborist Association after a year-long search for the biggest elm in New York. It is 85 feet tall, 23'4" in girth, and shaded 12,200 square feet.

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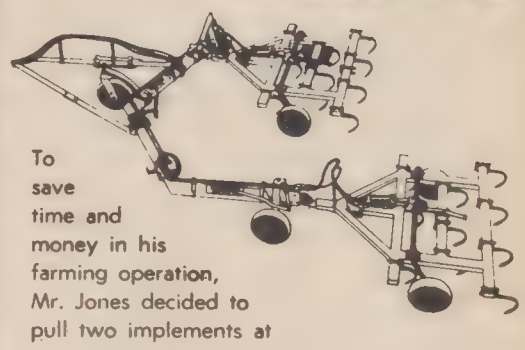

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With Our ADVERTISERS

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A versatile new hygrometer has been developed for fast, accurate moisture testing of all grain, hay and seeds. The new instrument is called "Quicktest," and is distributed exclusively by Howard S. Crane, Inc., P.O. Box 215, Oneida, New York.

The instrument is available in two models . . . Quicktest No. 2 with a 20-inch stem for moisture testing in shallow bins, hoppers, mixers, and sacks. Or Quicktest No. 4 with a 40-inch stem for testing grain in ventilated bins or deep-hopper storage.

New York State's first 2000-gallon bulk tank has been installed at the Leo Dickson and Sons farm near Bath, New York. It's a Zero tank, and is at the business end of Zero Concord milkers.

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This is the first 2,000-gallon bulk milk tank allowed in New York State by the State and City Health Deartments. Presently, it holds the milk from 175 cows . . . milked in a double-8 herringbone milking parlor.

The Dicksons only recently moved their herd into a new 254×80-feet barn with 225 free stalls.

Photo: Earle Welch

Almost every tiny New England village has a steepled white church nestling in a hollow, close to the surrounding hills. With the autumn foliage a riot of color, each new scene rivals all others.

POPULAR TOURS

In 1968 our two **Fall Foliage Tours** through New England proved so popular (they were sold out long before it was time to leave home) that we are repeating them this year. The dates are **October 3 to 11** and **12 to 20,** and here are just a few of the places we will visit.

Old Sturbridge Village is a fascinating place any time of year, but never is it more delightful than in the fall when days are crisp and trees a riot of color. Time turns backward, as we see how people lived and worked in a New England country town 150 years ago. Watch a newspaper taken from a 200-year-old printing press, a horseshoe being formed by the village blacksmith, and taste gingerbread fresh from a brick oven in the farmhouse kitchen. We'll have lunch at Tavern-On-The-Green and enjoy shopping in the various gift shops and country stores.

We spend two nights in Plymouth and explore the places made famous by the Pilgrims. We'll see Mayflower II, Plymouth Rock and typical Pilgrim dwellings, also Cape Cod and its colorful villages — Hyannis Port, Barnstable and Sandwich. The historic Boston area comes next where we travel the Freedom Trail, visit Lexington and Concord, and enjoy a seafood dinner at famous Anthony's Pier 4 Restaurant. Driving north, we stop at Salem to see Nathaniel Hawthorne's "House of the Seven Gables."

We stay overnight in Portland, Maine, and pass through the beautiful resort section which surrounds Sebago Lake before crossing the New Hampshire border. There in the White Mountains, we travel through some of the loveliest natural scenery in New England. Mt. Washington and other peaks of the Presidential Range may be snow covered by the middle of October, with sides of the mountains vividly arrayed in every imaginable shade of red, orange, and yellow.

We will ride the Skimobile to the top of Cranmore Mountain and drive the length of the Kancamagus Highway to Franconia Notch where we pay our respects to the "Old Man of the Mountains." In Vermont, we visit the Maple Grove Museum, the state capital of Montpelier, and the Vermont Marble Company's display at Proctor. We travel the New England Heritage Trail back to Albany, where our tour both begins and ends.

The cost of this wonderful 9-day vacation is unbelievably low — just about $300! Like all American Agriculturist tours, this will be an escorted trip arranged by our tour agents, the Travel Service Bureau of Needham, Massachusetts. Your all-expense ticket covers everything — transportation, first class hotel accommodations, meals (with the exception of one dinner in Boston) and tips, plus all scheduled sightseeing.

We will be happy to send you a free copy of the illustrated itinerary; just fill out the coupon and mail it today. We suggest that you make your reservations for this trip as soon as possible, so you won't be disappointed in finding there's no space left.

European Tours

We'd like to remind you of our three remaining tours to Europe this year and hope you'll come with us on one of them. On our **Grand European Holiday (September 11 to October 22),** we will visit many of the most famous and enjoyable sights of England, Holland, Germany Austria, Italy, Switzerland, Luxembourg and Belgium. We will cross the Atlantic on the world's newest and most luxurious ship, Queen Elizabeth 2; arrangements can also be made for any who prefer to fly one or both ways.

Dates for our **Grand Alpine Tour** are **July 31 to August 21.** This is the first time we've offered this tour, and included are Austria, Liechtenstein, the Tyrolean and Bavarian Alps, Salsburg, a steamer cruise on the Danube River, Vienna, the Italian Dolomites, St. Moritz, Lucerne, Berne, and Interlaken in Switzerland, along with Gornergrat summit and its magnificent view of the Matterhorn. We already have a fine party signed for this fascinating tour, and we guarantee you a vacation you'll never forget!

We've called our tour of Greece and Turkey **"A Journey Into Antiquity,"** and the dates are **September 16 to October 7.** On this unusual trip we will visit Belgrade, Dubrovnik which is known as the "Pearl of the Adriatic," the town hotel of Sveti Stefan, Athens, and Delphi before boarding the luxury cruise ship "Stella Oceanis" for a week-long cruise through the Greek Islands. We'll stop at Crete, Rhodes, Efessos, Istanbul, and two islands of the Cyclades. This is truly a tour you won't want to miss!

Heart 'O The West

Last month we described this tour at some length. The dates are **August 2-24,** and included are many of the most scenic and historic places in our Country. A few of them are Mount Rushmore and the Black Hills, Yellowstone National Park, the Grand Tetons, Salt Lake City, Bryce Canyon and Zion National Parks, Denver, Pike's Peak and the Royal Gorge.

Write today for day-by-day itineraries for all trips which interest you. Each folder also tells how much the trip costs. A vacation with American Agriculturist is the nicest way to travel, for our tour manager looks after all details — all you have to do is relax and enjoy yourself!

Gordon Conklin, Editor
Box 370-T
Ithaca, New York 14850

Please send me without obligation on my part, the following tour itineraries:

Heart 'O the West _____ Canada-Bermuda Cruise _____ Fall Foliage Tours _____
June Alaska Tour _____ Alpine Tour _____ Scandinavian Holiday _____
August Alaska Tour _____ Grand European Tour _____ Greece-Turkey Tour _____

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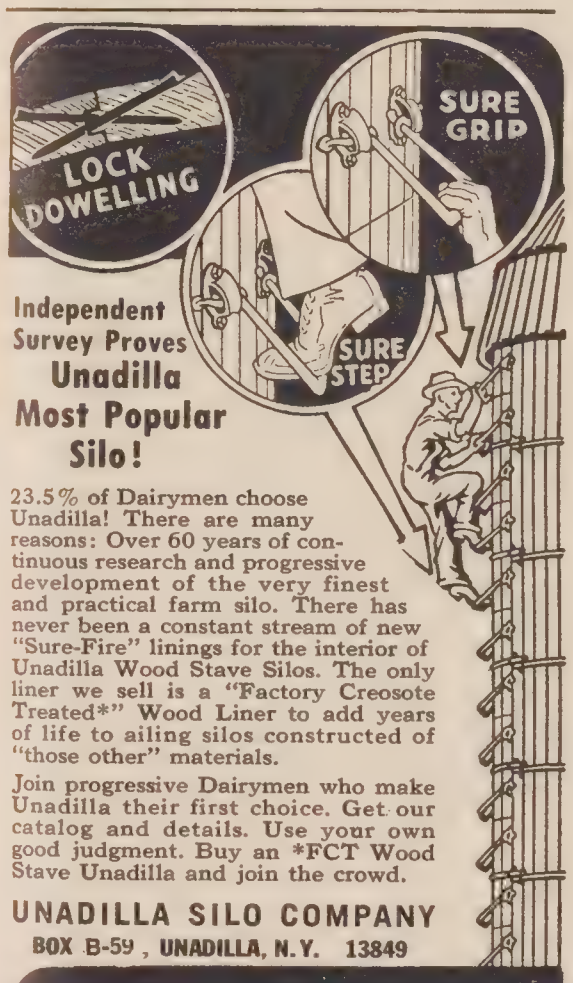

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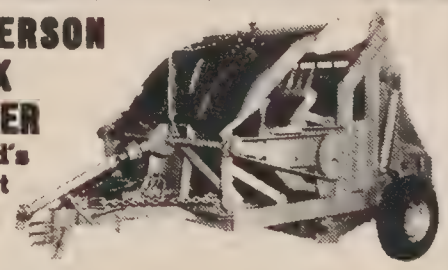

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Dollar Guide

For The Northeast Farmer

SOME SOIL SPECIALISTS say the need for liming cropland is probably greater today than it was ten years ago. Among the reasons advanced for this view are the following: (1) the increased tonnage of fertilizer used by farmers, much of which leaves an acid residue in soil; (2) increasingly-higher crop yields remove more calcium, magnesium, and other minerals from the soil; (3) with more irrigation, more minerals are leached down throughout the soil, thereby raising the acidity; (4) with the trend toward deeper plowing, more of the acid subsoils are brought to the surface and add to the soil acidity problem.

Unless U.S. farmers put more emphasis on liming, the gap between the estimated 86 million-ton annual need and the 29 million-ton rate of application will be widened and the efficiency of other fertilizers applied will be decreased.

LEAFHOPPER DAMAGE on spring forage seedings made without a companion crop can wreck an otherwise good seeding. Leafhopper is a pea-green, wedge-shaped insect about 1/8th-inch long, found on underside of leaf. Malathion, methoxychlor, or Sevin are recommended for control.

DR. JAMES R. CARSON of Purdue states that culling of caged hens definitely pays. After six months of production, about 10 percent of the birds have stopped laying. Dr. Carson estimated that two men could cull a flock of 10,000 in about four hours. The cost of this labor would surely be much less than the value of the 20 tons of feed which would be eaten by culled birds.

PENNSYLVANIA peach producers will vote some time in June on a proposal to assess themselves for funds to be used for advertising, promotion, and research. The plan, which would provide $20,000-$25,000 annually, would affect only growers with 500 or more trees. It has been endorsed by the State Horticultural Association and the State Peach Marketing Council.

AT CORNELL recently a speaker predicted that in coming years farm costs would rise faster than farm prices, thus reducing the spread between costs and income. This would encourage bigger farms in order to maintain income. It would also increase importance of good management.

PROSPECTS ARE GOOD for limitation of $5000 per farm for each government program a farmer is in. If passed, would apply to 1970 crops.

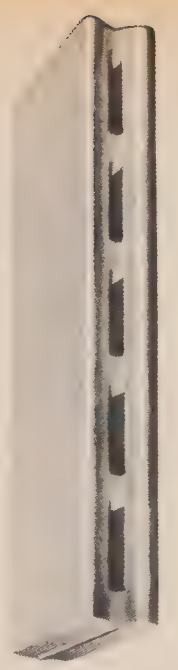
PROBABLY chicken meat (no skin) will be allowed in sausage and hot dogs by government without change in name. Also probable is limit (perhaps 32%) for fat in sausage.

IN MARCH, U.S. farmers indicated intention to plant 254 million acres to major crops ... up 1 million. Big increases in soybeans (up 1.4 million) to 43 million acres.

WATCH FOR proposal to phase government out of present price support and control program over a five-year period. Farm Bureau is pushing. Along with plan would be land retirement of about 10 million acres per year (whole farms) for 5 years.

RECENT CHANGES in New York State and New York City health codes are expected to speed the change from milk cans to bulk. Codes, plus economics of milk handling, may bring complete changeover in two years.

SLOW BREEDERS are a source of lost profits in dairy herds. It pays to watch cows carefully, note any abnormal condition, keep accurate records and consult your veterinarian promptly when needed. Professor Sam Slack of Cornell says, "Accurate breeding records provide a basis for drying off the cow, when to breed following calving, and many other aspects of managing a herd."



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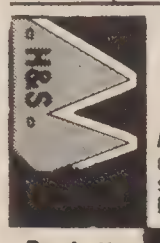

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Ed Eastman's Page

THROUGH THE MIST OF YEARS

With both Mother's and Father's Days coming along soon, the problem arises as to what to give them that they will really prize all the rest of their lives. We think the answer is a copy of Ed Eastmen's book, "Journey to Day Before Yesterday." Here is a book that helps people relive the happy days of their youth, a book which they can read and reread many times, bringing back vividly the days that never will come in real life again; a book that stirs happy memories of scenes that you thought you had forgotten.

Letters continue to pour in from readers for whom the book brought many happy hours. For example, Mr. V.C.S. writes:

"I must say I have enjoyed the book immensely. To an eighty-one-year-old it brings forth memories of my own growing-up days on a farm in southwestern Ohio.

'How bright through the mist of years
My quiet country home appears.'

"Your book has helped me to bring back thoughts of those happy days."
—M.E.R.

To get a copy write to Department Book, American Agriculturist, Savings Bank Building, Ithaca, New York 14850. The cost of the book is $7.30 including tax.

COULD RUIN OUR SCHOOLS

Without intending to do so, the United States Supreme Court seems intent on destroying our public schools.

A few years ago the Supreme Court overruled New York State courts and said that prayer or reading of the Scriptures could not be used in the public schools. There is no question that this ruling is against the wishes of a large majority of American parents. But it seems we are to have minority instead of majority rule in this Republic.

Now, more recently, the Supreme Court has ruled that children in the public schools have a right to hold protest demonstrations. That means if students don't happen to like a rule or regulation they can protest with a demonstration and refuse to obey it. How much order, or discipline, I ask you, would there be if the same rule prevailed in your family when either you as a father or a mother told your children to do something?

Good discipline is the very heart of a good school.

YOUR INSURANCE POLICY

In these rapidly-changing times, nothing changes faster than property values. When did you last read your insurance policy? Chances are good that your property is not insured for enough. Are your household goods covered?

Take time right now while you think of it to read your insurance policy, and sleep sounder tonight.

SAVE OUR RESOURCES

One of the most important commissions that has been appointed in New York State in recent years, is the Agricultural Resource Commission. The work of the Commission is based on the fact that the most important possessions that the people of the State . . . both producers and consumers . . . have are our agricultural resources, its land and its waters.

Just a day before this was written a young farmer, living near a city, told me that his good land was fast becoming too valuable to farm. Great new highways, parks, and playgrounds are rapidly gobbling up good farm land. We are just beginning to realize also how valuable are our water resources.

It would be hard to appoint a Commission better able to protect our resources, both from the standpoint of the producer and the consumer, than the one that was appointed. It consists of nine voting members representing agriculture, business, and consumers, and exofficio many of the commissioners heading the departments of state government.

The Commission is particularly fortunate in having as its chairman Gordon Conklin, editor of American Agriculturist, who is in a position to represent everyone fairly, and especially rural people. The Commission has a great job before it, and its personnel headed by Gordon insures that the job will be well done.

EASTMEN'S CHESTNUT

My imagination has not been developed far enough so that I can appreciate modern abstract painting. Therefore I could easily get caught in a situation similar to that of two small boys who stared at an abstract painting in a modern art exhibit. Finally one of them whispered to the other, "Let's get out of here before they say we did it."

WHY PERMIT IT?

Garth Shoemaker, representing the Citizen's Expenditure Survey, said recently that national, state and local taxes take over thirty percent of corporate and individual income. Think of it. Before you can have a cent for yourself, you have to pay over thirty percent of your income to government!

PLOWING WITH A STICK

Ezbon Slosson, the first settler of my home town of Newark Valley, came hundreds of miles through the wilderness in 1792 with an ox team and sled. But there was no room on his sled for a plow. How, then, did he prepare his first seed bed for corn?

My friend, Dr. Louis C. Jones, Director of New York State Historical Society and head of Farmer's Museum at Cooperstown, New York, suggests that there was probably an open space around Ezbon's cabin where there were no trees or stumps. Dr. Jones thinks that Ezbon burned the ground over to get rid of dead grass and other debris and then, using a hoe or sharp stick, opened the ground for each hill and put in four or five kernels of corn. Because the virgin soil was so fertile, the corn was sure to grow.

I suggest that possibly Ezbon selected a piece of timber four or five inches thick and five or six feet long. From this heavy limb there projected a short, strong limb slanting forward, which nature had attached to the heavier stick. Then, by fastening an upper stick on for a handle, the oxen could be hitched to the front end and you had a plow. "Wow!" It would not turn a furrow, but would at least stir the ground. Such plows were in use from the time of the Egyptians.

There were plows in New England before the Revolution, but they were made of wood, and you can imagine how long they lasted in stony ground or around old stumps.

It was not until 1819, when John Jethro Wood at Montville, near Moravia, New York, built the first cast-iron plow, that any real progress was made in the invention and use of plows.

On this page is pictured a stick plow in use not so long ago in history. Contrast it with the modern tractor gangplow which may have anywhere from one to ten or eleven bottoms.

When I was young, I learned to plow with a side hill reversable plow that you had to raise at the end of the furrow and flop the moldboard over, locking it on the other side. I wonder how many oldtimers had experience with this plow? A good day's work with a strong team and a flat land plow when I was young was about an acre; now a tractor gangplow with three bottoms can plow two-and-a-half acres an hour.

Modern civilization owes much to the plow and the axe that cleared the forest and plowed the sod of centuries.

SERVICE BUREAU

For The Northeast Farmer

by M. A. Parsons

CAN YOU HELP ?

If you have the words to "The Old Lamplighter," please send them to Mr. Stanley Jiroudeh, 4 Rose Ave., Staten Island, N.Y. 0306.

* * *

Mrs. Erwin K. Allen, R.F.D. 2, Owego, N.Y., is trying to locate a copy of the article, "The Old Salt Road," that appeared in American Agriculturist about 25 years ago.

* * *

Mrs. H. E. Mackey, Medusa, N.Y. 12120, would like the poem by Elsie Robinson, the last line of which is "I'm out to make a record, and I've got what it takes!"

* * *

Mr. Bernard S. Majewski, R.D. 5, Amsterdam, N.Y. 12010, is looking for a greaseless do-nut machine, made by the Food Display Machine Co. of Chicago. It baked a triangular shaped donut, called "Brown Bobby," in an aluminum mold, baking 6 or 12 at one time.

* * *

Mrs. A. A. Tabolt, Box 81, Croghan, N.Y. 13327, would like the poem of the Presidents, beginning: "George Washington, that hero grand, was president of our dear land."

* * *

If you have a copy which you will sell of "The Red Anvil" by Charles Reginald Sherlock, published 1902, please write Mrs. Gladys M. Gostling, Munnsville, N.Y. 13409.

* * *

Miss Isabel G. Simon, Box 72, Long Eddy, N.Y. 12760, would like the words to the poem containing this line: "While cleaning the parlor, the kitchen got dirty."

* * *

"Whenever the moon and stars are set,
Whenever the wind is high,
Late in the night, when the fires are out, a man goes riding by."

If you know the name of this poem or the remainder of it, please write Mrs. Clara B. Fuchs, 128 Elizabeth Ave., Westfield, N.J. 07090.

* * *

Mrs. Thelma Stewart, Main St., Box 12, Coopers Plains, N.Y., would like old pictures of farm life of the past.

Mrs. Yvonne Albert, R.F.D. 2, No. Vassalboro, Maine 04962, is looking for old issues of The Maine Farmer. She would also like any of Jean Ingelow's poetry.

* * *

Mr. Frank H. Mellon, Adams, N.Y., is seeking information about a little hamlet called "Alder Bend," a few miles from Altona, N.Y.

* * *

ADDRESSES WANTED

Everett and Donald Fletcher or descendants. They were born and raised in town of Granger, N.Y. Last known address of Donald was Newark, N.Y.

* * *

Raymond C. Haire whose last known address was Newport, Vermont.

* * *

Martha J. Lane, last known address in 1914, R.D. 1, Seneca Falls, N.Y. Daughter of William C. Lane.

* * *

Miss Dorothy Wightman, librarian in Tompkins Co., N.Y., during 1928-1935. Went to Watertown, N.Y., in 1936.

* * *

John Hogan (or ancestors) who lived in Hunts, N.Y. Thought married to Emma Wohlsclagel. Son adopted by Weaver family and lived near Franklinville, N.Y.

* * *

Descendants of Jonathan Deming and wife, Hannah King Deming, who left Wayne Co., Pa., after 1850. Also descendants of Andrew Williams and wife, Mary Deming Williams, of same county.

* * *

Descendants of the Osborne family (Eleazer Samuel and Deacon N. Myron) from somewhere around Greene County, N.Y. Also, descendants of Dr. Reuben Phillips and his wife, Mary Bishop Cushman, of Madrid, N.Y.

* * *

Mrs. James Hurd and Mr. & Mrs. Joseph Ringland, or their descendants. Probably from Lysander, Cato or Oswego, New York.

* * *

Descendants of Rev. Timothy and Amy Babcock Poole, formerly of Conn. but last known in Brownville, N.Y.

* * *

August Aura (Gus) whose last known address was Lake Pleasant, Mass.

One Policy Not Enough!

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- **Hospital and Home Recuperation Income**
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Look over this list of claims paid—you may find a friend's name. Folks carrying several policies received larger payments.

Alphonse F. Cuomo, Altamont, N.Y. ..... **$ 253.42**
Slipped on greasy floor—inj. spine
Charles Bedwell, Belfast, N.Y. **1581.15**
Caught hand in corn picker—inj. fingers
Helen Beecher, Chenango Forks, N.Y. **349.00**
Fell out of car—inj. neck, knee, bruises
William Lippert, Allegany, N.Y. **1770.00**
Fell—fract. spine and vertebra
Walter M. Frazier, Freedom, N.Y. **225.84**
Fell from hay mow—inj. back
Joseph Staehr, Auburn, N.Y. **350.00**
Cow kicked—inj. teeth
Earl Loomis, Moravia, N.Y. **2729.40**
Auto Acc.—mult. cuts and injuries, head, shoulder, arm
Irma M. Gibbons, Sherman, N.Y. **903.15**
Grease spattered—burns of arm
John R. Wright, Mayville, N.Y. **1375.10**
Kicked by cow—severely injured hand
Alice M. Runkle, Elmira, N.Y. **355.66**
Tripped over cord—inj. wrist
Roy Peryea, Altona, N.Y. **1059.81**
Fell off tractor—internal injury
Harry M. Weeks, Homer, N.Y. **507.14**
Kicked by cow—injured thigh
Everett Griswold, Preble, N.Y. **1140.77**
Power lawn mower acc.—frac. toes
Leslie Cole, Hobart, N.Y. **502.19**
Cut thumb and tendons on glass
Joseph Telaak, Hamburg, N.Y. **1136.02**
Auto acc.—mult. inj.
Phyllis Notaro, Brant, N.Y. **587.93**
Auto acc.—inj. neck, hip, chest
Thomas P. Hogan, Malone, N.Y. **851.15**
Motorcycle acc.—frac. leg
Marvin L. Wilson, Edinburg, N.Y. ..... **$ 223.03**
Fell getting out of truck—frac. leg
Gerald Ivison, Byron, N.Y. **121.42**
Auto acc.—frac. ribs
Stanley Sutton, Prattsville, N.Y. **385.70**
Auto acc.—frac. ankle
Marion Lopat, Dolgeville, N.Y. **374.59**
Hand caught in machine—inj. hand
Alice Lynch, Middleville, N.Y. **309.12**
Swallowed bone
Richard T. Brown, Ellisburg, N.Y. **813.50**
Hit knee on motor—inj. left knee
Harold R. Robbins, Sackets Harbor, N.Y. **1546.39**
Thrown by cow—inj. back
Nina M. Virkler, Lowville, N.Y. **479.72**
Slipped & fell—frac. wrist
Erwin Lehman, Castorland, N.Y. **331.40**
Caught in door casing—injures hand
Rosella Rauber, Dansville, N.Y. **241.42**
Fell—frac. leg and knee
David L. Bush, Cazenovia, N.Y. **1486.78**
Auto acc.—injured ankles
James L. Rothfuss, Penfield, N.Y. **232.43**
Slipped and fell—inj. back and leg
Robert Roblee, Fonda, N.Y. **437.13**
Kicked by cow—bruised, injured knee
Harold Settle, St. Johnsville, N.Y. **1001.22**
Hay elevator fell while moving—injured back
Willard Edick, Boonville, N.Y. **1054.28**
Caught in PTO—injured leg
Sarah Kaltenbach, Vernon, N.Y. **411.90**
Auto acc.—injured ankle
George Newell, Skaneateles, N.Y. **358.89**
Choked on meat—inj. throat
Ernest Lukins, Marcellus, N.Y. **396.08**
Fell—frac. wrist

Recent deaths and retirement of long time fieldmen have caused openings in certain areas of New York State and New England.

We are now looking for several career minded young men who wish to become local agents.

To learn of the opportunities available write to P. O. Box 100, Ithaca, N. Y.

Kenneth Holcomb, Canandaigua, N.Y. ..... **$ 231.41**
Knocked down by cow—inj.
Robert L. Runnalls, Port Jervis, N.Y. **152.10**
Pickup truck acc.—frac. finger, bruises
Irene M. Anderson, Hamlin, N.Y. **306.42**
Fell—fract. ankle
Howard C. Welling, Hannibal, N.Y. **530.00**
Fell 10 feet—fract. heel
Franklin Curcio, Richfield Sps., N.Y. **122.14**
Struck elbow on car door—injury
Donald R. Bell, Winthrop, N.Y. **188.17**
Auto acc.—inj. both knees, elbow
Alfred S. Brown, Gouverneur, N.Y. **250.10**
Pitch fork in foot—infection
Allen Widrick, Heuvelton, N.Y. **283.20**
Board fell against hand—punc. wound
George Mulyea, Schenectady, N.Y. **1000.00**
Bulldozer rolled over—inj. leg
Frances Kodra, Dorloo, N.Y. **490.77**
Raking leaves, fell—inj. shoulder
Timothy P. Johnson, Sloansville, N.Y. **210.00**
Kicked by horse—injured elbow
Wayne Simpkins, Odessa, N.Y. **720.53**
Auto acc.—multiple injuries
Pearl E. Long, Geneva, N.Y. **308.11**
Clothes caught on shaft of elevator—frac. arm, inj. leg
Joseph Wachala, Prattsburg, N.Y. **1245.00**
Caught in saw—injured hand and arm
Eugene Sherwood, Cameron Mills, N.Y. **1630.00**
Auto acc.—frac. hip, arm, jaw
Olin F. Warner, Jr., Calverton, N.Y. **1447.14**
Hit by cable while pulling tractor from hole—inj. knee
Shirley H. Houston, Newark Valley, N.Y. **$ 129.86**
Hooked by cow's horn—bruised abdomen
George Wagner, Nichols, N.Y. **534.64**
Caught hand in field chopper—severe cut hand & fingers
Elwood Loucks, Groton, N.Y. **200.00**
Fell chasing cows—injured back, neck
John Floyd Cole, Newfield, N.Y. **198.56**
Tractor mower tipped over—inj. leg and foot
Alden Mead, Glens Falls, N.Y. **786.20**
Hit by tree limb—frac. leg
Wells Dodds, North Rose, N.Y. **525.00**
Truck-auto acc.—frac. ribs, bruises
Allison A. Fisher, Ontario, N.Y. **115.46**
Caught in drill press—inj. finger
Harvey L. Colegrove, Wyalusing, Pa. **720.35**
Fell—frac. ribs
Donald W. Buchanan, Lawrenceville, Pa. **216.46**
Pinned by log—bruised leg
Dante Coccodrilli, Lake Ariel, Pa. **446.84**
Slipped from ladder—injured foot
Daniel Green, Wrightstown, N.J. **345.86**
Fell—cut forehead
Joseph Carchesio, Jr., Englishtown, N.J. **215.50**
Auto acc.—frac. leg, cuts & bruises
Edgar A. Collis, Bernardston, Mass. **171.43**
Caught hand in fan—cuts
William D. Clapper, Wilmot, N.H. **494.23**
Auto acc.—inj. hand, knee, concussion
Mary Gleason, North Stratford, N.H. **270.00**
Stepped on by cow—inj. ankle
Lyman Flynn, Morgan Center, Vt. **1060.00**
Sno-Mobile acc.—frac. leg
Lauralee Searle, Vergennes, Vt. **217.14**
Slipped and fell—frac. leg

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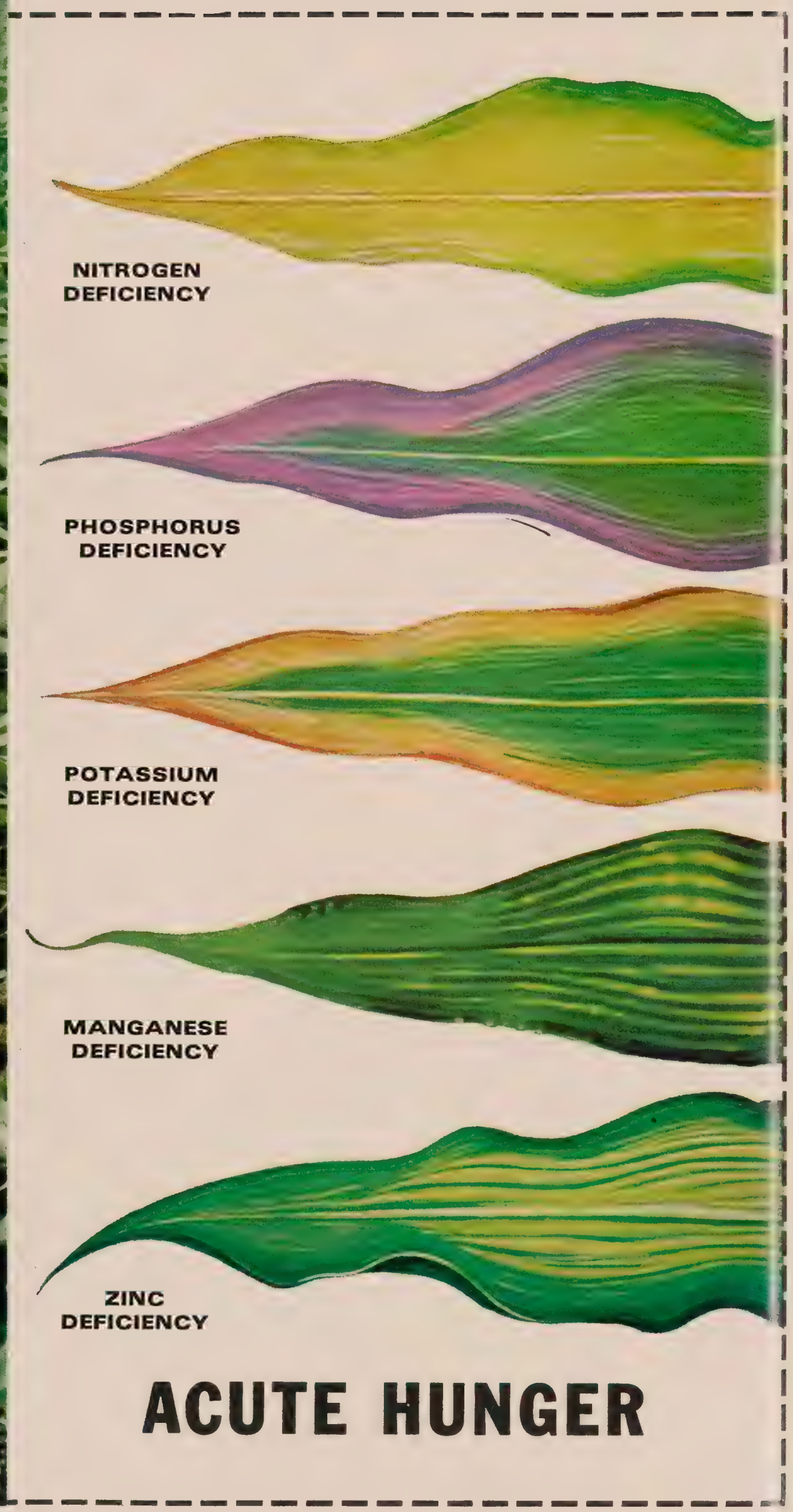

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Royster Company, Norfolk, Va. 23501

For The Northeast Farmer

JUNE 1969

American Agriculturist
and the
RURAL NEW YORKER

ENTERPRISE: a land-short New England farm gearing itself to support a 150-cow dairy

"We've got to be big as well as good. So we are expanding our herd without adding more men."

Dan Galusha, Fairfields Farm, Williamstown, Mass.

"Even though we own 600 acres," says Mr. Galusha, "very little is flat land, and only 161 acres are tillable. The rest is in timber, Christmas trees, and permanent pasture. We rent an additional 95 acres of cropland. Because our tillable land is scarce, we *have* to get higher yields from our enterprise to support more cows. Agway is helping us do this."

In a good year, Dan and Mary Galusha look for corn silage yields of 20 to 25 tons per acre to fill their new 60′ x 24′ Agway-Craine silo and the huge bunker silo scooped out behind the new Agway barn. Agway's Dave Manners works closely with Mr. Galusha to get the required yields through correct fertilization, plant population, and weed control.

Dave and Dan have had this association since 1956. Through Dave, Fairfields Farm is kept informed on what's new, and any special offers on Agway feed, seed, fertilizer, and other farm supplies.

"When we have an unusual situation, such as abnormal calf mortality, Dave brings in outside specialists to pinpoint the trouble and help us correct it," says Mr. Galusha.

Dave also made sure the Galushas understand Agway's Enterprise Services which provide a farmer with the backup he needs to reach his goals. Among these services is Agway's Profile Management Service, which provides a wide variety of computer-generated management reports. These give a precise fix on the state of the farmer's total enterprise and suggest the many alternatives that might be open to solve such problems as balancing available roughage to purchased feeds for the least-cost route to correct energy intake, or determining which cows need special attention to show a better profit. Through these Profile Reports farmers can better utilize their capital, land and labor.

No matter what your farm enterprise might be, Agway has developed services to assist you. These services go far beyond the supplying of quality commodities at competitive prices. They include planning and construction of buildings, complete automation systems for feed and roughage, herd-health and sanitation programs, petroleum services, and insurance programs to fit all farm needs.

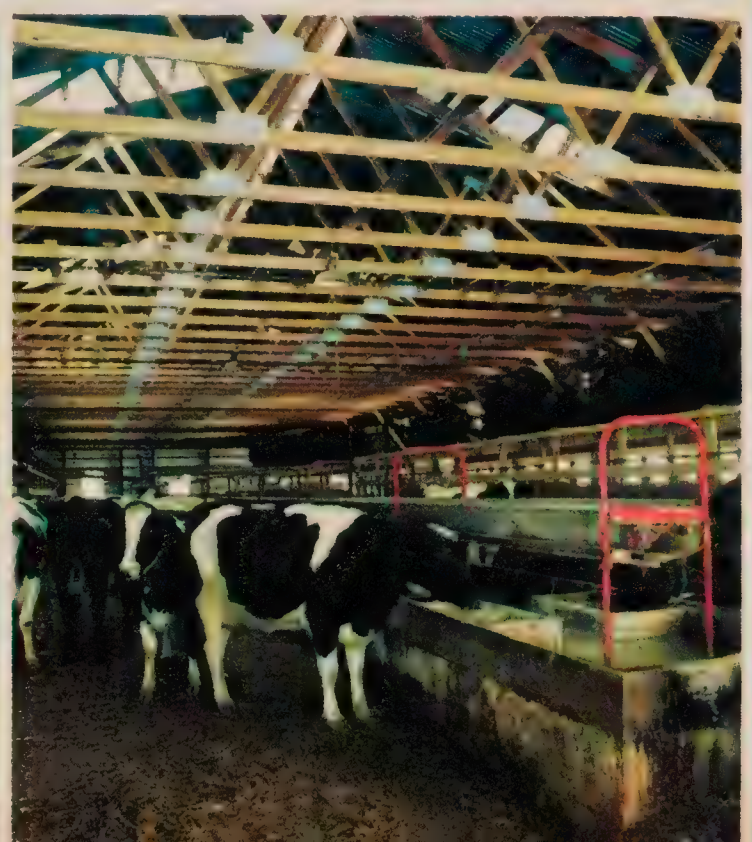
To find out more about Agway Enterprise Services, visit your Agway store or representative. Or write to N. E. White, Agway Inc., Box 1333, Syracuse, N.Y. 13201.

FARM ENTERPRISE SERVICE Agway

Dan Galusha and Dave Manners spend a lot of time planning so that feed, seed, fertilizer, and other supplies are on hand when needed. "When we're feeding a ton and a half a day, we can't run short. Same with spare parts. We're so mechanized that a breakdown would be a catastrophe," says Mr. Galusha.

In this spacious milkhouse, the Galushas have installed tanks which have a combined capacity of 1135 gallons. Dan and Jim, one of the three Galusha sons, check the milk level. "We have exceeded our capacity several times," says Mr. Galusha, "and we're going to install bigger tanks."

Nerve center of Fairfields Farm is this new 150-cow Agway loose-housing barn and adjacent 12-stall milking parlor. This barn is fully automated for push-button feeding of hay, silage, and grain. Outside is a 3000-gallon tank for storing molasses, which is poured on top of silage before it travels to the cows.



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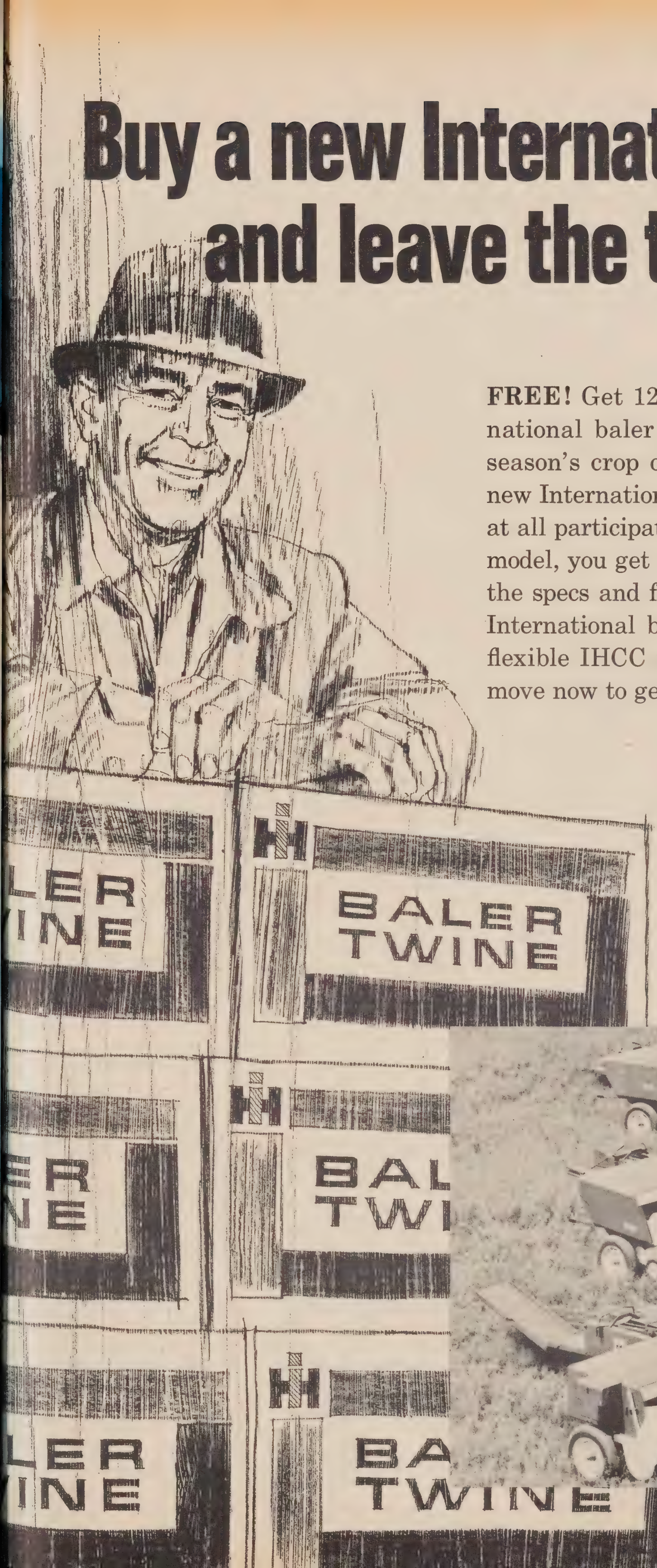

FREE! Get 12 cartons of high quality International baler twine – enough for an average season's crop of 6,000 bales – when you buy a new International baler before October 31, 1969 at all participating dealers. If you buy a wire-tie model, you get 12 coils of baler wire free. Check the specs and features on new 420, 430 and 440 International balers at your dealer. Check his flexible IHCC payment plans, too. Make your move now to get in on this free twine offer!

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"I don't think I'd ever put up anything but a steel building"

Dairy farmer Pat Schaeuble of Greenleaf, Wisconsin, doesn't have time for building maintenance and repairs. So when he replaced his burned-out barn, he specified Republic pre-painted RIGID•RIB® galvanized steel roofing and siding.

"There's absolutely nothing I have to do to keep this building looking good," he explained. "On my old barn, the roof had to be repaired twice since 1950. But we had a big windstorm since the new building went up, and you couldn't see those panels move a bit.

"I get fire resistance, durability, low maintenance, and economy. I'm just sold on everything a steel building has to offer."

Give your farm buildings the good looks, long life, and freedom from maintenance enjoyed by Mr. Schaeuble. Republic RIGID•RIB roofing and siding is available in plain galvanized sheets and in prepainted turquoise or white. Ask your local dealer or builder for RIGID•RIB.

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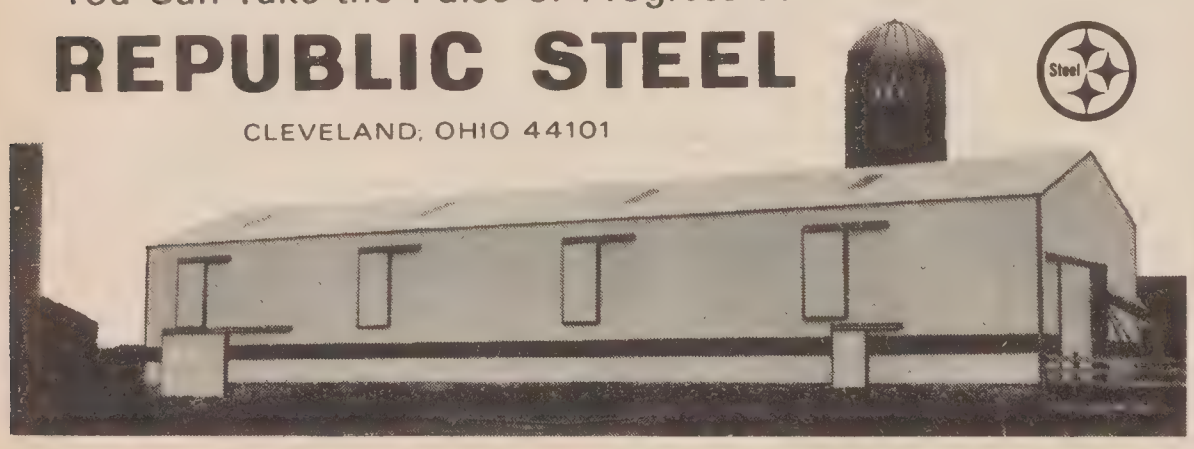

For The Northeast Farmer

American Agriculturist and the RURAL NEW YORKER

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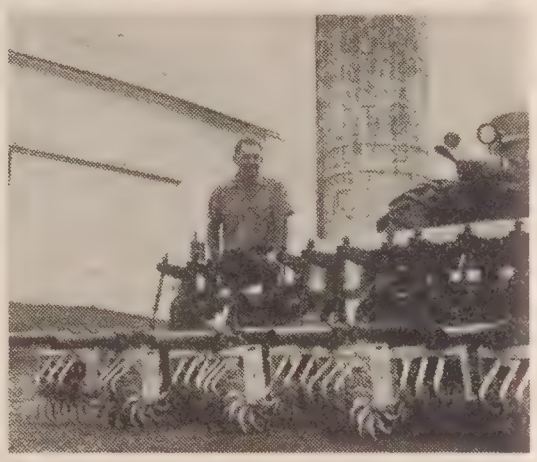
OUR COVER

What other time is so wonderful as a day in June? It's the season when strawberry shortcake tops off many a meal! Photographer Herbert Shumway of Greenfield, Massachusetts, took this picture of his son, Daniel, in the strawberry patch.

Mr. Powell and the ROLLING® CULTIVATOR



Burnette Powell*
Route 1, Rawson, Ohio

"The first time I heard about the Rolling Cultivator was at a sugar beet seminar. I was at the point of making a change in my tillage operation and decided to try the Lilliston unit on the basis of what I'd heard at the meeting.

"The Rolling Cultivator really did a fine job in my corn, sugar beets and soybeans—a lot faster and easier than my old equipment. I like its simple adjustment, too, and the way it mulches the soil."

The Rolling Cultivator will give you once-over, all over cultivation—pre-plant to layby—at speeds up to 10 mph. It saves so much time and labor that owners insist it pays for itself in one season.

*Mr. Powell is the top corn grower of Hancock County, Ohio.

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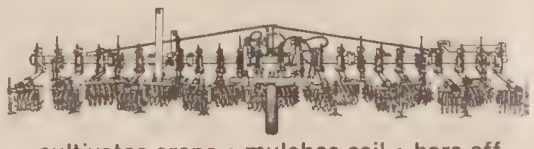

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John Deere gathering belts save stalks and prevent plugging

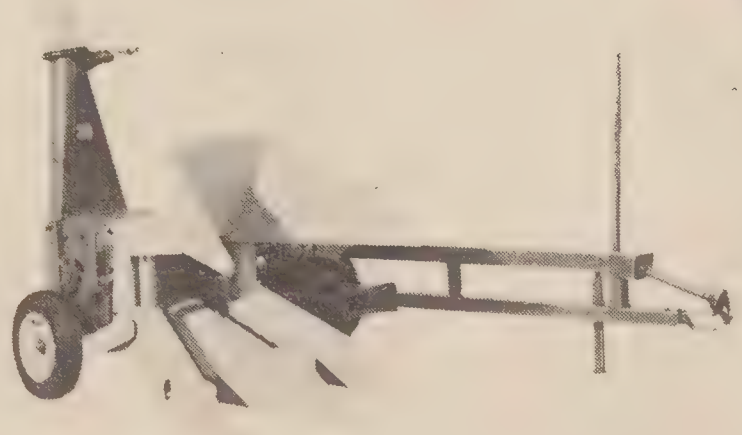
Gathering chains are gone from John Deere Forage Harvesters. Instead, rubber gathering belts firmly grip and carry each stalk to the feed rolls. Once the wide belts grasp them, stalks can't get away.

There's no chance for corn or sorghum stalks to hesitate, bunch up, and plug. These exclusive belts whisk a steady, uniform flow to the cutterhead. They are much simpler and far quieter than chain gathering systems.

Belt your silage-making troubles this year—chop with an economical 34 or heavy-duty 38 Forage Harvester. Ask your John Deere dealer for details. You'll see why these unique row-crop units let you forget plugging stops and lost feed. Then look into his practical Credit Plan—it's as modern to financing as gathering belts are to silo-filling.

JOHN DEERE

Moline, Illinois 61265



A unique top guide funnels stalks in. Low-profile snouts slip under lodged plants, eliminate waste produced by high-and-steep lifting.

EDITORIALS

by GORDON CONKLIN

ADDRESS AT GIMMIESBURG

The scene: A meeting of the SDS at Confused U., a large educational institution in the midst of a sprawling metropolitan area.

The speaker: long of hair, and short of stature . . . with burning eyes and karate-like gestures.

The message:

Fourscore and twenty days ago, our organization brought forth on this campus a state of anarchy, conceived in affluence and dedicated to the proposition that everyone should do as they damn please.

Now we are engaged in a great war against this university, testing whether that campus . . . or any other campus so conceived and so dedicated . . . can endure much longer. We are met on the great confrontation field of that war. We have come to dedicate a portion of that field as a final resting place for the ideals and aspirations of previous generations who were so stupid as to believe in our harmlessness. The administrators have been persuaded that it is altogether fitting and proper that we should do this.

And, in a larger sense, we will now desecrate . . . we will now annihilate . . . we will now violate . . . those irrelevant ideals. The foolish men, living and dead, who struggled to build this educational institution and its decadent philosophy, were weaklings who will now give way to us, their superiors.

The world will little note, nor long remember what was said here, but we will never let them forget what was done here. It is for us, the triumphant members of the Social Demolishment Society, rather to be dedicated here to the unfinished cause of reshaping education in our image at all levels . . . a work so nobly begun.

It is rather for us to be here dedicated to the great task remaining before us . . . that we take increased devotion to the cause for which our honorable comrades used their parental allowances to the last full measure of devotion . . . that we here highly resolve that our sacrifices made in order to become the New Establishment shall not be in vain . . . that this university, under us, shall have a new abortion of license . . . and that the exploitation of the productive, by the pungent, for the parasite, shall flourish on this earth!

LABORING ALONG

The long-smoldering issue of farm worker unionization is due to come to a head before long, likely this year. At the heart of the controversy is whether farm employees should be covered by the provisions of the existing National Labor Relations Act . . . from which farmers are now exempt.

Senator Harrison Williams of New Jersey is spearheading a drive by labor union leadership to include farm labor under NLRA jurisdiction. This would involve no-holds-barred strikes at any time, as well as the full gamut of provisions for union recognition . . . including membership solicitation, hiring halls, etc.

Farmers have for a long time . . . probably too long . . . taken the uncompromising position that they should be totally exempt from all union involvement and labor-management regulations. In the world as it is, this is hardly a realistic attitude . . . regardless of how temporarily comforting it may be.

The Farm Bureau has proposed national legislation with a number of key points:

– The National Labor Relations Board would not administer farm labor legislation. Instead, an Agricultural Labor Service would be set up in the USDA.

– The Act would cover any farmer with eight or more employees.

– Rights of workers to join or not join a union would be protected. This proposal will create as much union flak as any.

– Discrimination against a worker joining a union would be prohibited.

– Also prohibited would be strikes at harvest time, as well as secondary boycotts (such as has been used against the California table grape growers).

Farmers will lose the war . . . even though they might win a battle or two . . . if they fight doggedly for a continued exemption from all labor unionization laws. They will do better in the long run to seize the initiative and promote farm labor legislation that realistically comes to grips with the difference between farm and industrial labor problems.

HUMPTY DUMPTY

The Egg Marketing Board of socialist Great Britain has . . . after 12 years of operation . . . been scrapped. Egg selling has been returned to the free market, with the blessings of producer, consumer, and taxpayer alike.

The story of the Egg Board's rise and fall is something to keep in mind when thinking about nationwide control by government of agricultural production.

RETURN OF THE BRACERO

Remember when former Secretary of Labor Willard Wirtz pushed the braceros back to Mexico? These folks once came to the U.S. in large numbers to work on farms in the western sections of the country.

They can no longer come to Marlboro Country for those jobs that pay better than the ones back home. So now they stay home . . . and produce **food products** to ship across the Rio Grande!

Mexico now ranks **ahead** of California and Texas as a supplier of winter fruit and vegetable produce . . . second only to Florida, and gaining fast even on the Sunshine State! The U.S. imported $19 million worth of fruits and vegetables from Mexico in 1956 . . . up to $100 million in 1967.

If farmers push for barriers to such foreign products, they must expect to become involved in the thicket of retaliatory moves by other countries . . . and similar requests by U.S. industries to shut out foreign steel, tractors, baling twine, barbed wire . . . and even mink.

Heavy imports of mink pelts into the U.S. in 1967 dropped prices more than 28 percent, and drove many mink ranchers out of business, reports Congressman Ancher Nelsen of Minnesota. In 1968, there were 4,708,000 pelts imported . . . and the ranchers want mink import control legislation.

Few foreign workers are allowed bodily into the U.S. anymore, but what they **produce** finds its way here in large quantities . . . including meat and milk products. It's tough to try to overcome some of the basic principles of economics!

CONFLICT AMONG FARMERS

The idea that "all farmers should pull together" has been around a long time. The facts of life, though, are that all farmers can't see eye-to-eye on every question, because they're competitors.

The latest example is the change in USDA regulations that allows up to 15 percent chicken or turkey meat in sausage products . . . without any special labeling. Poultrymen are elated; the American National Cattlemen's Association is very unhappy.

There is a long list of such conflicting products . . . oranges vs. apples, oleo vs. butter, etc. It's a complication in the business of attaining stronger bargaining power for all farmers generally.

GUEST EDITORIAL

The practical thing we can do if we really want to make the world over again is to try out the old for a while. There are old things that made this country.

There is the old virtue of religious faith. There are the old virtues of complete integrity, loyalty, and truthfulness. There are the old virtues of incorruptible service and honor in public office. There are the old virtues of economy in government, of self-reliance, thrift, and individual liberty.

There are the old virtues of patriotism, real love of country and willingness to sacrifice for it. These old ideas are inexpensive. They even would help win hot and cold wars. Some of the old things are slipping badly in American life. And if they slip too far, the lights will go out of America. – *Mrs. Sara G. Wehrlin, Macedon, New York, quoted in the Rochester Democrat & Chronicle, Rochester, New York.*

WEEDS AND WASTE

A weed has been defined as any plant in the wrong place at the wrong time. Bad weather sometimes prevents the picking of a cornfield, and the ears as well as stalks are eventually plowed under. Many a field then has clumps of corn as weeds amidst other crops!

Similarly, waste can be defined as any valuable material in the wrong place at the wrong time. Animal manures can be a serious problem to the cattle feeder or dairyman, but are considered valuable fertilizer or fuel in some parts of the world. In some countries, women and children convert every bit of cow manure into a "brick" for later drying and use as fuel. A big American cattle feeding yard would seem like a gold mine to them . . . although it appears as merely a source of pollution to the anti-pollutors with which the U.S. is so abundantly supplied!

Preferably, waste disposal involves placing the waste back into the productive cycle in some fashion, so that it is converted from a problem to a resource.

There's a lot more to a Case man's combine than a 40″ cylinder!

The Case 660's 40-inch cylinder is 33 to 53% wider than others in its price class. That's mighty important—gives today's heavy crops "elbow room" to thin out. But big threshing capacity is only part of the advantage.

Every part is capacity-matched to get all the grain—clean, whole—and fast. Backing up the cylinder is a 40-inch wide, 4480 square inch separating area—and 2830 inches of cleaning. Micrometer-precision concave adjustment—on-the-go—keeps cracks and dockage to a minimum. 201 cubic inches of high-torque engine keep your harvest humming. On-the-go controls for complete mastery over crop and field conditions.

New fast-feeding, 20-finger auger for big capacity up front. 10-13-14-foot header.

New extra-wide 7-inch clean-grain elevator keeps up with heaviest yields. Top-driven for long life. No clean-grain bottleneck!

New hydraulic control of swinging unloader lets you position it from the driver's seat (optional).

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WEST CHARLESTON
Charleston Garage

DOC METTLER COMMENTS ON

The author is a practicing veterinarian at Copake Falls, New York

EQUINE INFECTIOUS ANEMIA

June is such a fine month that I wish I had a more cheerful subject than equine infectious anemia to discuss. But not talking about an unpleasant subject solves nothing, whereas if every horseman in the Northeast learns all he can about the disease and instead of sticking his head in the sand and hoping it will go away, sees to it that his voice is heard in favor of legislation to provide research funds to study this disease, we can solve our problem.

Horse racing yields $200 million a year of tax money in the ten northeastern states. Besides this, horse owners spend additional millions which help the economy of the country. A tiny fraction of this money is all that is needed to continue research in order to find a simple test to detect this disease and a cure or prevention. Until more is done, every horse in this area is in constant danger of contracting this incurable disease.

Equine infectious anemia is a virus disease spread from horse to horse by biting insects, by contaminated hypodermic needles, at breeding time by infected stallions to mares, and during pregnancy by mares to foals. Although the disease may be fatal, few horses with E.I.A. die . . . they just become useless, and until destroyed are a source of infection to other horses.

The typical symptoms are unexplained fever, anemia (seen by paleness of eyes and gums) and weakness. You all know what a wormy horse looks like. If you have a horse which looks wormy but is getting enough to eat and doesn't have worms, he could be an infectious anemia case. He may not show fever unless he is put under stress.

One such case was a pacer that came back from the track because he "hiked" behind. We had the owner taking the horse's temperature daily. One day he took it after working the horse instead of before; it was 105 degrees. He found that the horse's temperature would climb to 105 or 106 after a half-hour workout.

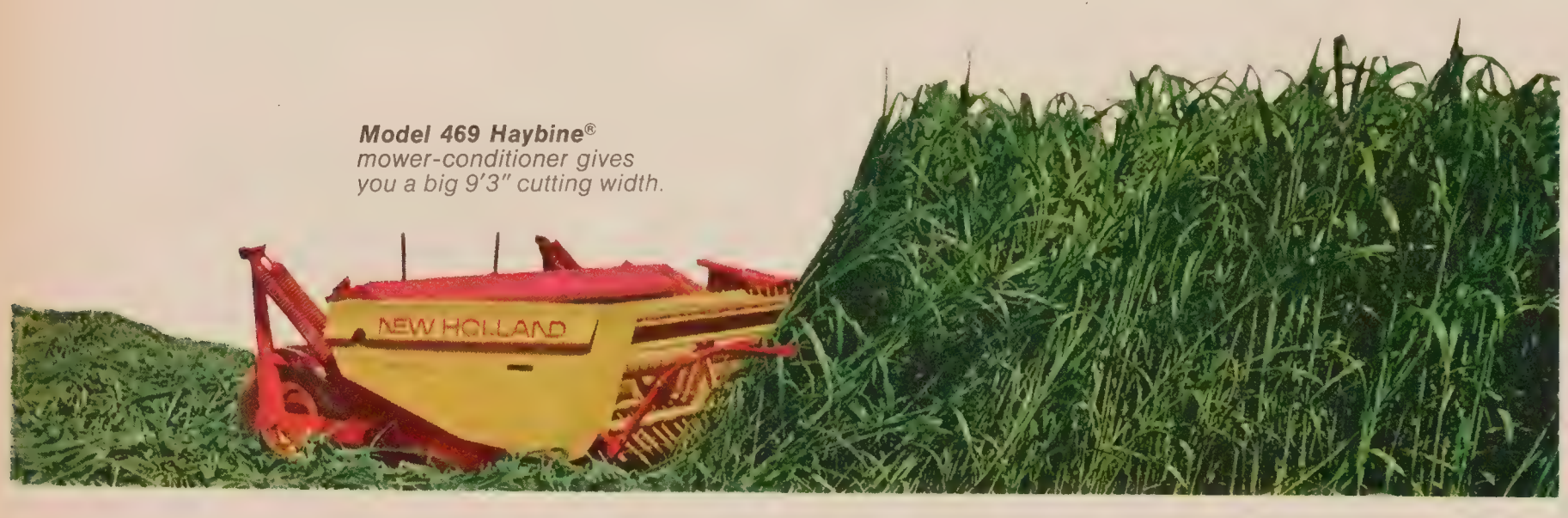
This horse was turned out to pasture for a rest and given iron injections to build up his blood. In two weeks he looked as though he was in top condition. However, after a few days of light work he began to show the same symptoms, and we had to face the truth. The "hike" behind was simply that he was getting tired so fast, and he really had infectious anemia. Autopsy proved this to be true.

Two young men I know started a standard bred breeding operation. They leased two good stallions and bought twenty good mares. One of the stallions was a carrier. He did not appear to have any sickness, was fat and slick, and a sure breeder. Every mare bred to him came down with the disease, and all of their foals either died at birth or showed symptoms of the disease within the first year after birth. Tests confirmed this diagnosis, but it took two years to realize what was going on. Needless to say, these men lost every cent they had invested, and are still in debt.

The Test

I have as yet failed to mention that the only test for this disease involves injecting blood from a suspected anemia case into a known healthy horse or pony and observing the test animal for three months. In other words, it takes a fresh clean pony to use as a test animal for each tested suspect. This is an expensive and cumbersome test.

If there was a test available by which we could check every animal in a county or other area in a two-week period during the winter, and destroy the infected animals, the disease could be eradicated. This sounds cruel, but many of the spreader animals are "retired" horses turned out to pasture which appear normal. All a fly has to do is bite one of these and then bite another animal and it will carry enough virus to infect the second animal. Every horse show you go to, every time you ride your horse past a pasture with other animals in it, you are taking a chance on a fly spreading infection from some other horse to yours. On the other hand, what good are your horses to you if you are going to keep them locked behind screen doors all summer?



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And each is "New Holland" through and through — broad-shouldered and big-muscled to take tough crops in stride

Model 1469 (SP) *is 9'3" wide*

SPERRY RAND

NEW HOLLAND

Besides flies and other insects, needles can spread the disease. Don't use multiple dose vials from horse to horse, and don't ever use a needle or syringe from one horse to another. If you draw medicine from a bottle with a needle or syringe used on one horse you may have contaminated the bottle so that every dose of medicine drawn from it will infect other horses. The virus will live at room temperature for over a year. Even in intermuscular injection you sometimes hit a tiny blood vessel. This brings blood back through the needle into the syringe. If you change needles, the syringe is still contaminated.

If you are loading a nervous horse at a show and someone says, "Here, I'll tranquilize him for you," look out! Lots of people can "needle" a horse, but few are careful enough to use separate needles. Chances are this needle and this bottle have been used on other horses. Only one of these needs to have been infected to cause you to lose your own horse.

Notice how your veterinarian uses a separate syringe and needle for each horse. Of course, this makes the bill a little higher, but wouldn't you rather pay a few cents more to know you are not going to gamble on giving your horse an incurable disease?

Research is going on in New York State and in many other states on equine infectious anemia. However, some states have just "legislated against the disease." They say it is illegal to bring an infected horse into their state. How do they know a horse is infected? No veterinarian can examine a horse in the field and say he is positive the horse does or does not have infectious anemia. Simply because a horse has a normal temperature and looks healthy is no reason to say he is not a carrier.

Let's start the ball rolling now, talk this up in your horse clubs, and be aware of the disease. Mention it to your legislators and see to it that more funds are made available to finish the research started on this costly disease.

"You mean fifty dollars just to fix the wheeze without even touching the rumble or the clank?"

Dates to Remember

June 7 - N.Y. State Junior Dairy Field Day, High Meadows Farm, Lafayette, N.Y.

June 7 - Iris Exhibition, Worcester County Horticultural Society, Elm Street, Worcester, Mass.

June 8 - Western Massachusetts Goat Show, Fairgrounds, Northampton, Mass.

June 8-11 - National Plant Food Institute Annual Meeting, The Greenbriar Hotel, White Sulphur Springs, W. Va.

June 9-20 - Second Farriers Short Course, University of Connecticut, Storrs, Conn.

June 11-12 - 84th Annual Meeting Holstein-Friesian Association of America, Disneyland, Anaheim, Cal.

June 15-19 - 38th Neppco Egg Quality School, Rutgers State University, New Brunswick, N.J.

June 19-21 - 22nd Annual Delmarva Chicken Festival and National Chicken Cooking Contest, Seaford, Del.

June 21 - First Annual New Jersey Blueberry Festival, Smithville Inn, Smithville, N.J.

June 22-27 - American Poultry Congress Annual Meeting, Sherman House, Chicago, Ill.

June 24-25 - Poultrymen's Get-Together, Morrison Hall Auditorium, Cornell University, Ithaca, N.Y.

June 25-27 - American Poultry Congress, Exhibition Center, The Sherman House, Chicago, Ill.

June 25-28 - Professional Improvement Conference, Syracuse County House, Junction U.S. 90 and 81, Syracuse, N.Y.

June 26 - Rose Exhibition, Worcester County Horticultural Society, Elm Street, Worcester, Mass.

June 26-27 - Annual Summer Tour Pennsylvania Horticultural Association, sponsored by Berks County Fruit Growers Association and Lehigh Valley Fruit Growers Association.

June 28-July 1 - 34th Annual Meeting National Apple Institute, Claridge Hotel, Atlantic City, N.J.

July 8 - Weed Control Field Day, Wye Institute, Queenstown, Md.

July 18-19 - New England Sheep and Wool Growers Show & Sale, Luther Belden Pavilion, West Springfield, Mass.

July 20 - Cato Rotary Club Third Annual Fly-In Breakfast, Whitford's Airport, Weedsport, N.Y.

July 20-26 - National Farm Safety Week.

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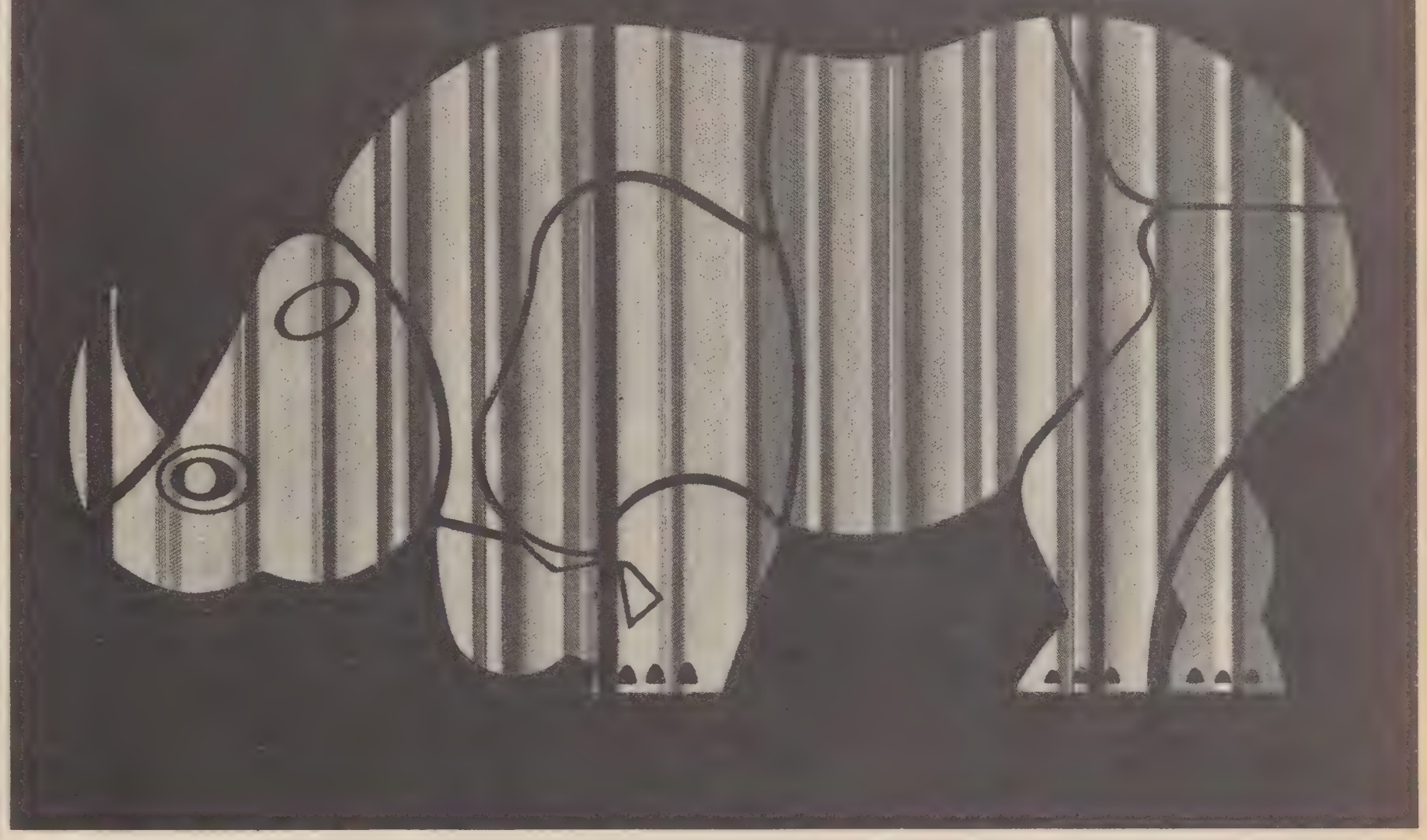

A new rugged rib shape for rigidity and strength.
The photo shows why Rhino-Rib is stronger. Sides of ribs are nearly vertical for strength. Ribs are ¾" high—35% higher than most previous metal farm roofing and siding products. Stands up to heavier loads, adds overall strength to farm structures.

A super-alloy for durability and corrosion-resistance.
Check the improved bump, scuff, hail, and corrosion-resistance of Rhino-Rib. Puncture tests show it withstands 50% more impact than conventional aluminum farm roofing and siding.

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A fine hex embossing pattern gives Rhino-Rib a satiny, non-glare natural finish, but it comes in modern, long-lasting baked enamel finishes, too—Polar White, Mocha Tan, Hunter Red, Terrace Green, Ivy Green, and Dawn Blue.

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Your dealer or builder will tell you that lighter, larger panels (36" or 48" coverage widths, up to 30' long) go up faster, reduce seams, overlaps, fastenings; span purlins up to 36" o.c. There's also a complete back-up of accessory products, including Ever-Grip screw fasteners.

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Based on a typical farm structure, a 40'x60'x12' machine shed, open on one side, Rhino-Rib is lower in material cost, in delivery, even in installation . . . as compared to 29 gauge, 2½" corrugated, galvanized steel. Actual estimate of comparative costs available on request.

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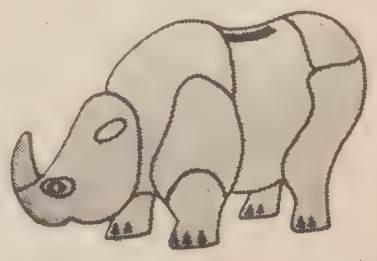

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Team the powerful 55″ Hi-Throw Blower with the new 800 Recutter. Bring fine chopping right to the silo. Keep harvesters chopping.

Blower features tough, six-bladed fan . . . Gehl engineered to make efficient use of every bit of air power it produces. Whirling at 540 RPM, it blasts material into the tallest silo. A water intake opening allows you to add water to crops . . . keeps the rim free of haylage deposits. Features adjustable outlet, "Quick-Touch" leveling, recessed wheels, slip clutch, emergency apron clutch, convenient fan adjusting.

Add the 800 Recutter now . . . or later! Attaches quickly to the 55″ Blower. Assures you of uniform, fine chopping . . . harvests *fast* when crops are at their nutrient peak. Because crops pack tight, nutrients are preserved. The 800 Recutter cuts at 1,000 RPM with a nine-knife, 22″ wide cylinder. Tungsten-carbide cutting edges are standard equipment.

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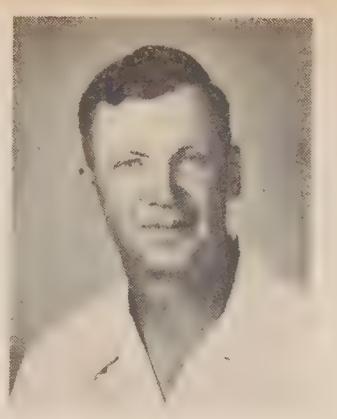

Gayway Farm Notes

by HAROLD HAWLEY

CROWNVETCH

Hope springs eternal, etc. A couple of years ago we were much intrigued and impressed by the beauty and the erosion control features of plantings of crownvetch along some Pennsylvania highways. We straightway ordered some seed, which never grew. We suspect lack of proper inoculation.

Last year we tried again. No score! This year we have put plants and seed along a bank between our house and barn. This is a spot visible from our kitchen table. It is under our flag pole, and if we can establish a good stand of vetch here it will add beauty and pleasure. Doris has the traditional green thumb, but we've done about as poorly on this project to date as on any we've tried.

Hopefully, success will come along unexpectedly as it did with our trees. For several years, we tried to get some birch trees started. A friend brought some down from the Adirondacks, and finally on the third try, we got two dandies going.

During the same period, we kept planting cut-leaf weeping birch trees with no success. Then lo and behold! the nursery stock also lived the same year the wild trees prospered. It's a good thing we got some started then so we have some replacements for the elm trees which have died or are dying.

DEADLINES

Several years ago a corn grower from Colombia, South America, commented on the frantic rush and tear he faced twice annually. His labor peaks in corn growing, just as here, were at planting and harvesting time. The only difference was that the two activities came together. You see, he grew two crops of corn a year, and it was a mad scramble to get one crop off so as to get the next one planted on time. Six months later he would go through the whole process again.

I've always regretted that I was not smart enough to ask if he couldn't stagger his planting and harvesting so as to be involved with only part of his harvesting and planting acreage each month. As near the equator as he was, seasonal temperature changes wouldn't be much of a factor. Whether there was a seasonal rainfall variation which dictated when the crops of corn must be planted, I do not know. At any rate he had two built-in labor peaks each year which were dandies. If you don't think so, ask many of us in this area who were involved in picking some of last year's corn and getting ready for this year's crop during April!

A combination of weather left a lot of corn still in the field until the ground dried out this spring. Talk about not knowing which way to turn . . . whether to rush the plowing and planting for this year's crop or stop and harvest the rest of last year's! All this in a year when many of us had been convinced we would forget all the advice of the past and really plant early. By early around here, we mean before or around May first. This would mean about a two week advance in planting dates.

In practical terms this would mean putting corn in the ground about as soon as a seed bed could be readied regardless of the calendar. It has been interesting to note how many farmers have "bought" the idea of earlier planting based on the results in other areas. A few years ago, it would have taken a much longer period to bring about so basic a change in thinking and practice.

FLY IT EVERY DAY

It's a sad commentary on the general attitude about flag flying that the death of a beloved former President brought forth more flags this spring than have been seen in many months. Naturally, I'm not decrying the display of the flag at half-mast on such an occasion. What does seem regrettable is that most of those flags are now neatly folded away in a chest or drawer until Flag Day, or July, or whatever special event may bring them out again.

At a time when, for various reasons, we as a people in a great nation have become divided over many issues, it seems doubly important that we try to draw together whenever possible. There has always been room under our flag and in our country for peoples from every land and race and persuasion.

Millions have sacrificed that there should be opportunity for all in a democratic society of free people. There is tolerance for a wide spectrum of opinion on many of the critical and sensitive problems of the times. In spite of our individual stands on any of a dozen major questions, and of our heat and zeal in defending our convictions, there is still a place under our flag and in our hearts for those who disagree.

Because of our differences and

(Continued on next page)

the strife resulting therefrom, it is doubly important that we continue to recognize and proclaim that it is an essential part of the democratic process that a free people shape their destinies by the peaceful orderly process of disagreement, discussion, and majority rule. Flying the flag does not assure that these processes will be observed or that the privileges will not be abused. It **does** denote pride in being a citizen in a country that offers opportunity, responsible individual freedom, and a glorious future for those who earn it.

Regular continuous display of our flag should serve as a stimulus to us all to preserve our precious heritage of freedom. The flag is, of course, but the symbol of the hopes and aspirations of a free people, but it is that symbol. It is a privilege to fly it and to thereby proclaim that we are proud of our country and want to preserve, strengthen, and improve it. Keep 'em flying!

COUNTRY ROADS

In this area where continuous snow cover kept us from having frozen ground except for very rare intervals this past winter, there was a minimum of break-up of roads this spring. The usual heaving, rutting, and ruining of roads just didn't happen. Many roads weren't even posted.

This whole business of posting roads in the spring is getting to the point of making it clear that we need to do some new thinking about how farm-to-market roads ought to be built. With bulk milk trucks and bulk feed trucks a necessary part of the rural picture, and both of them plus gasoline trucks far exceeding any posted weights, it becomes a fact of life that many of our country roads will have to be rebuilt to new specifications. The only alternative is to partially ruin these roads every spring and then rebuild them. There isn't much choice but to exempt necessary trucks and school buses and face the damage they do.

Some folks have been critical of the requirements of the Irwin road program. As we move our products, supplies, and kids in these bigger vehicles, the Irwin roads may well prove to be the only locally-built roads which will stand the beating in springtime. It's going to be more expensive to build roads that way, but probably far cheaper in the long run.

PICTURE INTO FOCUS!

To the extent that a corn program is intended to reduce corn production, it may not be so all-fired important who participates in it. Whatever land they take out of production will reduce over-all supplies.

The Auburn newspaper has been publishing a list of people, plus the payments to them by townships, of all the participants in the corn program in Cayuga County. It's a real eye-opener.

In our township, for instance, the number of bonafide full-time commercial farmers who received payments totaled three. Part-time farmers, real estate developers, absentee landlords, the local FFA chapter, professional people, and retired or semi-retired farmers accounted for the rest.

My real gripes are only two. The rate of payment really doesn't affect us as we aren't in the program. However, it is a source of wonder to observe that some of these farms which never did raise much have about as large a per-acre payment as do the good commercial farmers on good land. In other words, some are getting paid for diverting more production than they ever made even in a good year.

The other gripe has to do with the image that we all get from such a program when really a very small percentage of commercial farmers are a part of it. Taxpayers in general take a pretty dim view on payments to agriculture, and when . . . as is true locally . . . the payments mostly aren't going to commercial agriculture, I hate to see the industry all stamped with the same label. Public opinion to the contrary, a great many of us are paddling our own canoes, and do not have our hand out to the government for public funds.

"Sit down and relax . . . the demonstration your father's at has to do with a new tractor!"

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As with any miticide, always follow instructions on label.

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Break the resistance cycle. Uniroyal introduces OMITE miticide, the master miticide that can be the backbone of your entire mite control program. OMITE kills mites that have developed resistance to other chemicals. It controls a broad spectrum of pests including McDaniel, two-spotted and European red mites on apples, peaches, pears, plums and prunes.

OMITE has effective residual killing action. Effective mite control continues after spraying. OMITE can be used close to harvest time. On apples, for example, it can be applied up to 7 days before harvest (see label for timetable on other crops). OMITE is recommended primarily for summer use.

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UNIROYAL

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Personal Farm Experience

COMBINATION STABLING

Arthur Davis of Genoa, New York, has dairy cows in stanchions, comfort stalls, and free stalls . . . 143 cows in all. He and his son Charles sold two million pounds of milk last year . . . with less than $100 spent for outside help.

All cows are milked in a double-3 herringbone milking parlor. Current rolling herd average is around 15,200 pounds of milk per cow. "We may lose a little production per cow with the free stall and milking parlor," Art says, "but it's more than offset by gains in labor efficiency. If I had to start from scratch, I'd have all free stalls."

All milking cows . . . wherever they're housed . . . get 10 pounds per cow per day of ground ear corn, combined with enough soybean oil meal to give a ration with 18 to 20 percent protein. In the parlor, milkers receive more grain . . . the amount correlated to production.

Seventy-five percent of the total annual roughage consumed by the herd is made up of corn or hay-crop silage.

Art doesn't plan to extend free stalls into the old barn, which is attached to the free-stall addition. He says, "You might better spend money on building the way you want it, rather than trying to toggle up an old structure that has a lot of built-in limitations." Asked about changes he'd make in free-stall setup, he reports a preference for plank-and-angle-iron partitions, rather than the pipe partitions he has.

After reaching 2 to 4 months of age, all heifer calves are raised by Art's daughter and son-in-law, who live near Dunkirk, New York. An indication of the kind of job being done there . . . and on the Davis homestead . . . is the fact that a number of planned matings have been made over the years for bulls to go to a young-sire testing program at some AI stud. In fact, nine such youngsters have been selected over the last 10 to 12 years.—*G.L.C.*

NOATS

Roy P. Smith and son Roy E. Smith, who operate a 135-cow dairy farm near Pompey, New York, are others in a lengthening list of northeastern farmers planning on growing no oats in 1969. They had 20 acres in 1968, and hired them combined . . . but they also successfully seeded a field without a "nurse crop" in '68. Not only did it "take" well, but they got a respectable cutting in the seeding year.

The Smiths are growing alfalfa, but believe red clover may have some things going for it in very short-rotation cropping patterns (especially in the light of weevil damage). They plan 150 acres of corn in 1969, hoping for a silage tonnage that will last for year-round feeding.

Present feeding patterns involve 80 percent corn silage and 20 percent hay, plus a 20-percent-protein pelleted feed in the double-6 herringbone milking parlor. Four pounds per cow per day of a 16-percent-protein grain are fed with silage.

The Smiths' hired a custom operator to fill their two 24×60 silos in '68 . . . a job done in 10 days from 110 acres of corn by the use of a two-row, self-propelled chopper. With added acreage this year, they hope to also fill two older 14×40's with corn silage.

More corn . . . no oats . . . equipment flexibility from hiring some custom work . . . all are management practices that are increasingly common on northeastern farms. — *GLC*

CATTLE FEEDING

Robert Mason of Ontario, New York, owns 500 acres comprising his Cerro Indio Farms. Until 1962, he raised considerable acreages of vegetables, but now sells hay and corn . . . plus marketing crops through dairy replacements and beef animals.

He has a maximum capacity for 450 animals, comments that overhead costs limit profit potential if the outfit is operating much below capacity. Two cattle

(Continued on next page)

Robert Mason has a well-equipped and heated farm shop.

Get weed control that's worry-free

If you grow vegetables, weeds should be the least of your worries.

Just use Dacthal, the worry-free weed preventer. It gives you dependable preemerge kill of grasses and important broadleaf weeds. And it's cleared for more crops than any other herbicide. Equally important, Dacthal controls weeds without injuring your crops. It's gentle — especially to those vegetables that can be touchy about certain herbicides.

And while you get season-long weed control with Dacthal, you won't get harmful after-season residue. So you can rotate crops, or plant a second crop, with no carryover problem.

Weeds? They can be the least of your worries, with Dacthal weed killer working for you. From Diamond Shamrock Chemical Company, Biochemicals Division, 300 Union Commerce Bldg., Cleveland, Ohio 44115. A unit of Diamond Shamrock Corporation.

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worry-free weed control

dealers . . . one located at nearby Webster, and the other at Cortland . . . have an informal understanding with Bob concerning arrangements for raising dairy heifers, boarding dry dairy cows, and feeding out beef animals.

High-moisture ear corn is stored (after going through a burr mill) in a 20×60 silo; corn silage goes into one 24×60 upright silo . . . plus a horizontal silo that is 180 feet long, 60 feet wide, and silage averaging 11 feet deep. Plastic covers the silage in the bunker . . . along with 2600 tires! Some haylage goes into the bunker, too . . . in fact, Bob fed during the 1968-'69 winter some good-quality haylage put up back in 1967.

There's a bunk feeder equipped with an auger 175 feet long here, but Bob uses only 90 feet of it. He also uses a separate fence-line feed bunk . . . says he would prefer this to be 36 inches wide, instead of 30.

Animals come on the farm as yearlings or older, so there are no calf-raising problems. It's operated as a cold-barn setup. Bob reports fewer disease problems this way as compared to a warm-barn arrangement. He likes 35 square feet of building space per animal, but sometimes has to squeeze them into less.

High-moisture corn, reports Bob, is an expensive ration for boarding dairy animals . . . he feeds it to beef animals for finishing. His reaction to the Holstein steers he's fattened is less positive than to regular beef breeds.

The farm work force here includes Bob and one full-time man, plus a high school boy in winter . . . and two full-time men during the summer.—*G.L.C.*

BUNKER SILO

Raymond Aungier of Tully, New York, went on a dairy tour to Connecticut some time ago . . . and saw some horizontal silos that led him to build one on his farm.

It's 80 feet long, 30 feet wide, and 8 feet deep. The floor is concrete, the sides made of wood silo staves taken from two old tower silos on neighboring farms. Railroad ties . . . anchored in concrete . . . provide side support for the sidewalls (placed 4 feet apart on center). Total cost was $1600 . . . a figure that includes a charge for labor contributed by Ray and his brother Joe.

Outdoor bunk feeder is close to the bunker silo at the Aungier Brothers farm.

A bunk feeder nearby the horizontal silo cost $2400 to build, including a concrete apron 28 feet wide. The bunk is 110 feet long, 4.5 feet wide, and is roofed.

Corn silage for the 70 milkers here is put into the horizontal silo, and hay-crop silage into an upright 16×50. When the supply of corn silage comes close to running out, the Aungiers feed a mixture of corn and hay-crop silage for a few weeks in order to smooth out the transition from one kind of roughage to another.

Older heifers (yearling or older) run outdoors all winter, with only a lean-to shed for protection. Ray reports that he very seldom finds them in the shelter, unless there is a cold rain or wet snow. They appear to thrive on a ration of hay and mineralized salt. — *GLC*

DEER REPELLENT

Some dairymen . . . even those who normally like to watch deer . . . cringe a bit when deer herds move in on new seedings at springtime. With hoof and teeth, the "wild ones" can work over a field pretty thoroughly.

One northeastern dairyman reports that a light coating of manure will prevent much transgression. Sure, he knows that the experts generally recommend no manure topdressing for legumes . . . but, under the circumstances, he thinks it's the best choice!

RYE BY AIR

A few farmers in Dutchess County, New York, are experimenting with hiring a custom airplane operator to sow a rye cover crop in corn. Sowing is done from August 15 to September 1 . . . and the rye has already taken hold by the time the corn-picker rolls into the field.

CODE WORD

Those zip codes, planned to meet the need
For getting mail at greater speed
Have zipped me right into disaster.
The bills now come a whole lot faster.

Donna Evleth

For dairy farm financing . . . use your own brand of help

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Food For The Spirit

by Robert Clingan

CLOUDS AND WIND SPEAK OF GOD

The summer of 1968 I had the experience of visiting Monticello, home of Thomas Jefferson. On the side of the hill or "small mountain" . . . which is the meaning of the name . . . is a family burial plot. It began with the grave of a boyhood friend of Thomas Jefferson, but is now limited to direct descendants of this great American. As I looked through the iron fence at the gravestones inside the enclosure, I began reading epitaphs. One impressed me in particular. It read, "He saw God in the clouds, and felt Him in the wind."

This says so much. It can say even more than the author intended. No one knows for sure how much or how little was meant by these words engraved on a piece of marble in the Jefferson family cemetery. If I were to use them to describe a person, this is what I would be saying:

Here is a person whose knowledge of God was not limited to the written Word, sacred script, or the Bible itself. He saw God in the works of His creation; he saw Him in the movements of clouds across the sky. To him the world of nature spoke of God; the signs in the sky that other men used to foretell the weather disclosed to him a sense of the deity. The earth and the sky were filled with "footprints of His God," for he saw Him everywhere, even in the clouds.

"Even in the clouds!" This man saw the manifestations of nature as a gift of God and a daily disclosure of His nature. Some saw the clouds as robbing them of sunshine, depriving them of picnics . . . but this man knew what clouds were for, and he knew that without them the moisture of the earth would never be replaced. The clouds had an important place in the scheme of things. He had faith enough to believe that their essential nature outweighed the destructiveness of their storms . . . and even these would have meaning were we given power to know the whole story.

He also felt God in the wind. Here we think of the wind that lightly brushed against his cheek, rather than the tropical storms or tornadoes and cyclones. The wind spoken of here is the wind that made him feel the presence of God. This was something he could lay hold of by an act of faith. His faith enabled him to see the hand of God in the gentle breeze that caressed his cheek, and not merely in the movement of the clouds that could not escape his vision. He reached out and laid hold on a reality that heals and quickens, and makes us whole again. It is these quiet experiences of touch and feeling and awareness that speak to the depth of our souls.

It is no wonder that Jesus Himself compared this awareness of the reality of the life of the spirit with the reality of the wind. The wind is not seen, and its source and destiny is not given the individual person to know. But the reality is there and it cannot be denied. Blessed is the man who learns to live by the quiet forces that create and renew and refresh even though they are invisible.

How wonderful it must be to know the full dimensions of a life described as one who "saw God in the clouds and felt Him in the wind!"

A POND SPEAKS

Rippling waters on a pond
Rippling here and then beyond
Tell a tale to thinking man
How he helps in God's great plan.
How each action, thought and word
Affects others, seen and heard.
This effect goes on and on
Sometimes Pro and sometimes Con;
Works against the common good
Or uplifts true brotherhood.

The reflection of the trees —
Water still, without a breeze
Mirrors how our lives impress
Others with their loveliness.
When one mind reflects on mind
Much is done for humankind.

When the dragonfly takes wings
Then it is that my heart sings;
Does man find a life above
Where he's drawn by Cosmic Love?
Or is grub more than man
In the Master Worker's plan?
So my pond renews my youth;
Makes me long for all the Truth.

John Edwin Price

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Our say so? No. Our customers testify the "1230 Series II" is better three ways:

1. handles meaner haylage
2. throws out of larger silo
3. unloads on lower current draw

So, demand *Command Performance*—the new Customer-certified Van Dale "1230 Series II".

INSIDE SECRET: NEW "WHIP-SNAP" V-PADDLE ON 2-FOOT IMPELLER. Exclusive! New deeper, larger V-Paddle has special angle and pivot location. "Revs up" *throwpower* with stronger, faster "whip-snap" action.

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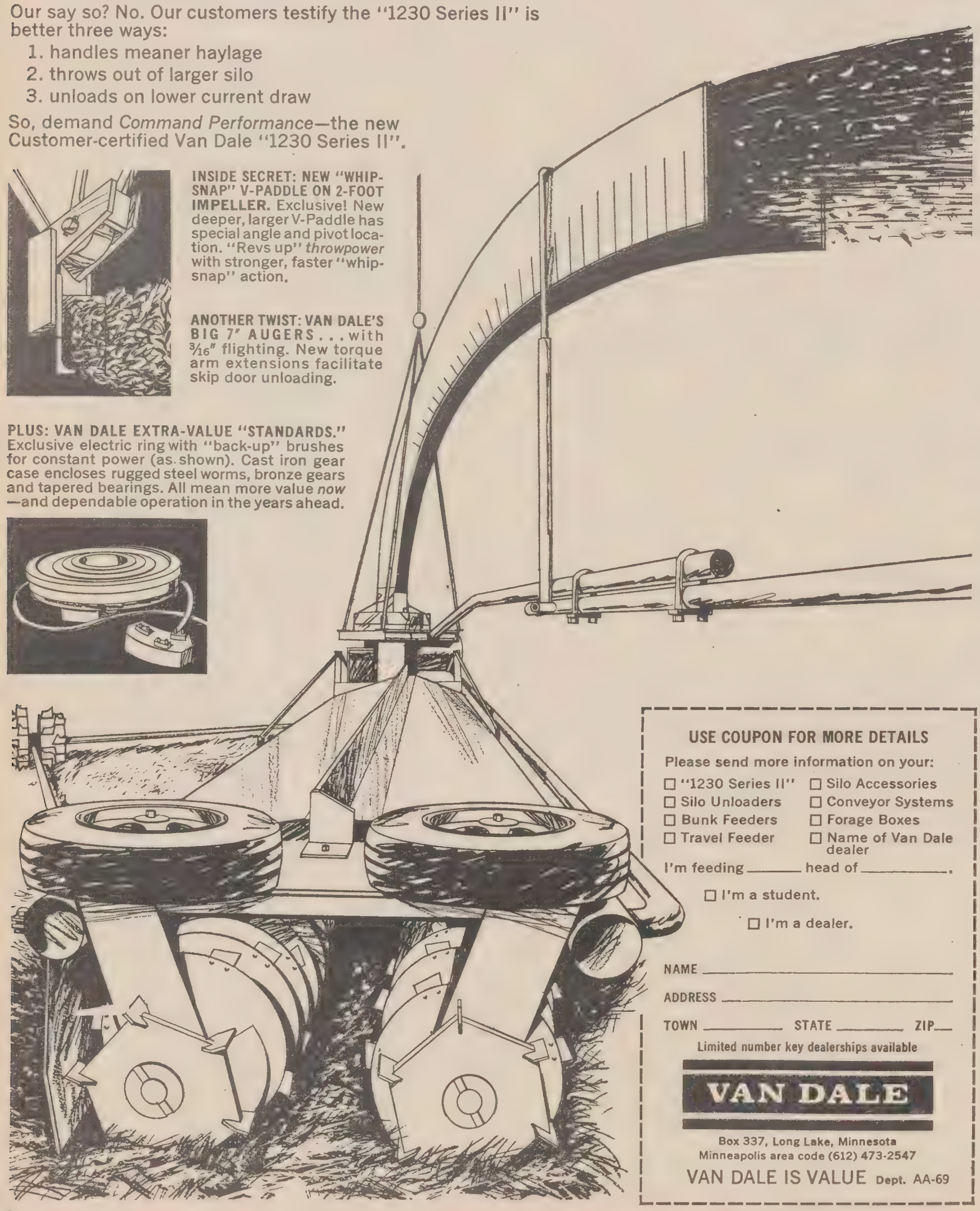
PLUS: VAN DALE EXTRA-VALUE "STANDARDS." Exclusive electric ring with "back-up" brushes for constant power (as shown). Cast iron gear case encloses rugged steel worms, bronze gears and tapered bearings. All mean more value *now* —and dependable operation in the years ahead.



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ALAR®: a new orchard management concept

1. Stop-drop control. *One* application of ALAR . . . does it. Left side of this tree was treated with ALAR . . . right side was not. Since apple drop ranges from a normal 10 to 15% to as high as 70% in severe years, it's obvious your savings can be substantial with ALAR.

2. Firmer apples. Over-ripening and softening is delayed as the apples remain on the tree. In fact, pressure tests prove ALAR-treated apples run 1 to 3 pounds higher than fruit from untreated trees.

4. Stimulated flowering. Profits start here . . . at the budding stage. You can promote the development of additional fruit buds, and encourage a good return bloom (left) by timing your one ALAR spraying 10 to 14 days after petal fall. The same treatment will help bring young apple trees into a flowering condition at an earlier age.

3. Improved color. Here's another difference you may see as a result of Alar treatments. Red varieties often take on color earlier, turn deeper, brighter as ALAR works with nature . . . holding apples on the tree longer (left) to soak up more sunlight right up to harvest time.

5. Regulated vegetative growth. The same ALAR spring spraying (left) that stimulates fruit buds also retards vegetative growth by as much as ⅓rd for that season. You know what that means. Less pruning. More growth energy directed to profitable fruit-bearing production.

6. Delays Water Core. ALAR delays the onset of water core in Red Delicious apples. Left tray above shows ALAR-treated apples; right tray untreated.

Want to know more? There's a detailed report on next page

UNIROYAL

HELPING NATURE WORK FOR YOU

Here's how ALAR can work for you

ALAR is a growth regulant—a remarkable new *chemical tool*—actually a new concept for orchard management. Like all sophisticated tools, it must be used properly to achieve maximum results. ALAR helps you produce bigger crops of better apples. Lets you utilize new techniques that make production and harvesting more efficient . . . marketing more profitable. *You get a better price for better quality.*

As one major orchard manager, active in our ALAR test program, stated it . . . "I couldn't compete in the apple business without this new product."

Summer application.
(45 to 60 days before normal harvest)

You save on labor and avoid market gluts because ALAR keeps apples on the tree in prime picking condition beyond normal harvest time. Fruit won't over-ripen and get soft as it does when most stop-drop chemicals are used. Pressure test figures on apples treated with ALAR run 1 to 3 pounds higher than on fruit from untreated trees. And ALAR may even help red varieties become redder. In addition, the onset of water core in Red Delicious apples is delayed. *All benefits that boost your profit advantage.*

Or springtime application.
(10 to 14 days after petal fall)

You save on pruning costs because vegetative growth is reduced approximately ⅓ for that season. Beyond lower pruning costs, this allows more of the tree's capacity to be directed into producing fruit. These ALAR-treated trees develop *more fruiting buds.* In apple varieties that tend to get too big or soft, ALAR also controls fruit growth to produce smaller, firmer apples. Springtime treatment with ALAR *encourages return bloom.* It can aid in bringing Golden Delicious trees into annual production.

You reset nature's time clock

Because of the reduction in vegetative growth and increased fruiting bud development resulting from spring treatment with ALAR, *young trees* come to *fruit-bearing maturity* several years earlier than normal. And the ability to control tree size will be a great advantage as orchard managers turn more and more to high density plantings.

Apply it ONLY once a year

It is important to note that trees should be treated with ALAR only *once* a year. Spraying time is *determined by the effects you desire.* As with all chemicals, ALAR must be used exactly as directed on the label.

These are the profit-producing facts about ALAR, the newest creation of Uniroyal research . . . a new orchard management tool that reduces drop and also increases fruit quality and storability. That reduces vegetative growth, yet increases fruit bud development. All these factors will help you to increase productivity.

Get your crop off to a profitable start. Visit your Uniroyal dealer soon, or mail coupon. ALAR and other growth regulants, herbicides, fungicides and miticides are creations of the laboratories of Uniroyal Chemical, Division of Uniroyal Inc.

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Send me the free booklet "50 Questions Answered About ALAR." At no obligation, of course.

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STANDBY EQUIPMENT

by Amos Kirby
New Jersey Editor

STANDBY POWER to meet sudden cutoff of electricity in times of storms is being installed on many farms. Milking parlors, poultry houses, cooling tanks for milk, and ventilating systems need standby power in summer as well as at any other time of year.

There are two types of equipment available: (1) tractor-type generators; and (2) self-contained power plants. Both require installation of a transfer switch between the electric meter and the service entrance.

From an economy position, the tractor-driven generator costs less, in most instances less than one-half of the self-contained unit. The big advantage of the permanent installation is that it is immediately available for use. If you doinstall a permanent unit, make sure it is large enough to carry the maximum load. With the tractor as a power unit for emergency generator, estimate at least two horsepower for each kilowatt output of generator.

NOT RECOMMENDED

Can I use leftover pesticides? That is a question many growers are asking. The answer of the pesticide experts at the agricultural college is "Yes" and "No."

If the 1969 recommendations are the same as they were last year, and the material is in good condition, it may be used. But if the recommendations have changed . . . and they have in many instances . . . it's better not to use the leftovers.

CORN BORER

The corn borer caused more damage to New Jersey field corn in 1968 than in any year in two decades. The borer can be controlled by spraying, but the cost is greater than the borer injury. On anything but seedling corn, insecticides are not recommended. If you do use an insecticide, apply either Sevin or Parathion, directing the spray down in the whorl.

THIN-SHELLED EGGS

The problem of thin shells on eggs comes from a study conducted by the College of Agriculture, the Extension Service, and poultrymen. The cause probably is insufficient calcium in the feed, particularly in midsummer when feed consumption is lower than during the cool, cold months of the year.

There is a tendency for the birds (especially those in cages) to pick up the larger portions in the mash. During hot weather the birds eat less feed, and as a result they do not pick up enough limestone to meet the need for calcium to make a satisfactory shell. Recommendations are to increase the percentage and particle-size of calcium in order that the birds may secure the supply of calcium needed to produce a better shell.

HUNGER AMONG CALVES

Those young calves on pasture need more than grass if they are to develop into big, husky heifers, says the Dairy Division at the New Jersey Agricultural College.

Young heifers should not be turned out on pasture until they are at least six months of age; even then they will need supplemental grain until ten months old. The reason for the grain supplement is that the stomach of a calf is small, and it cannot absorb enough grass to develop as it should. The grain supplement fills in the spot to enable the calf to gain proper weight and size.

AGREE ON WASTE DISPOSAL

The City of Vineland and poultrymen have agreed upon a system of waste disposal. This involves liquid manure and solid waste material:

1. While the use of this material within the city is to be discontinued, a disposal site for liquid waste will be provided by the city.

2. Stockpiling of manure is to be permitted without the addition of superphosphate and hydrated lime, provided it was covered with at least two inches of soil. Such a procedure would result in little odor until the pile was opened.

3. No spreading during the summer months, unless the manure be disced under or plowed under immediately after being applied.

4. No water puddles to be permitted adjacent to piles.

5. No fly breeding conditions to be tolerated.

6. No equipment used on the highways which would allow the manure to drip or fall out of the truck or spreader.

7. Trucks hauling manure must be covered with canvas to prevent the feathers and manure from falling on the highway.

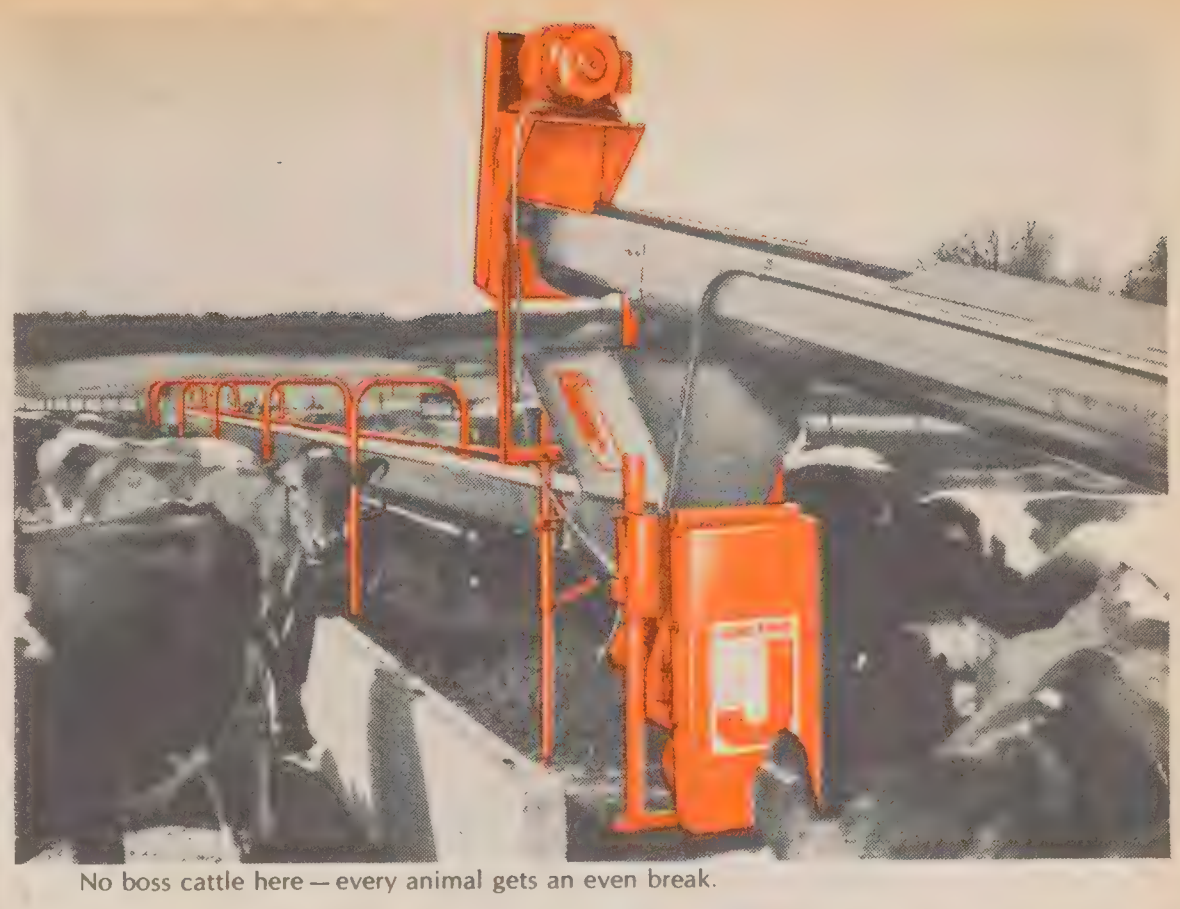
This proposal as approved by producers and the mayor is subject to a public hearing, at which time objections will be heard before final approval can be given by the City Council.

SUGAR BEETS

Another crop to supplement tomatoes, potatoes and beans. New York Sugar Industries has contracted several hundred acres of sugar beets in the South Jersey area, where potatoes and tomatoes have been the bread-and-butter crops for many years.

Unsatisfactory prices for white potatoes in recent years, and

(Continued on page 21)



No boss cattle here — every animal gets an even break.

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Automatic! Fills, dumps and recycles automatically. Manual control, too.

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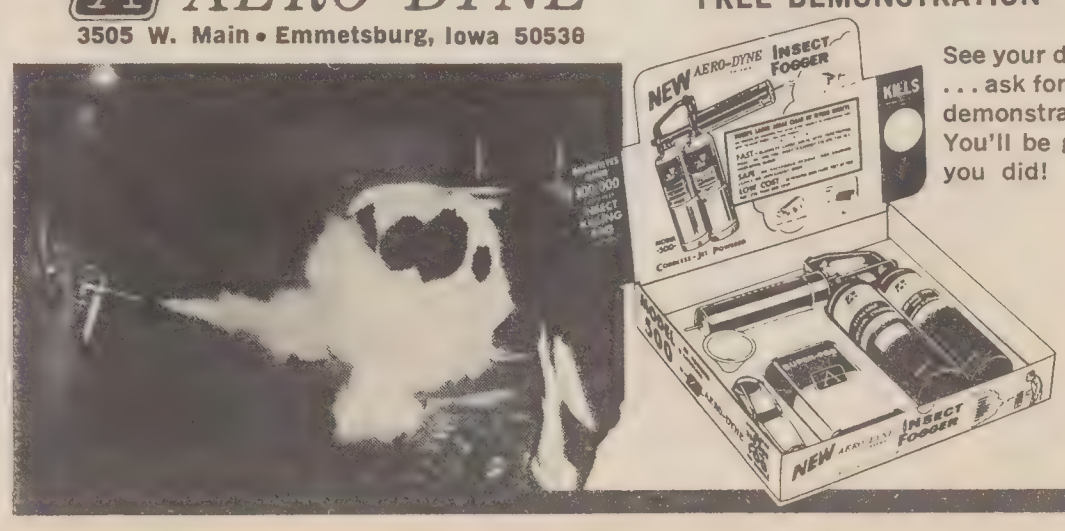

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1969 FAIR DATES

Information supplied by State Departments of Agriculture

PENNSYLVANIA

Kimberton Community Fair	July 16–26
Shippensburg Community Fair	July 20–26
Reading Fair	July 22–31
Butler Co. Fair	July 21–26
Troy Fair	July 22–26
Plainfield Farmers Fair, South of Bangor	July 24–26
Clearfield Co. Fair	July 28–Aug. 2
Goshen Country Fair, West Chester	July 28–Aug. 2
Jacktown Fair, Wind Ridge	July 30–Aug. 2
Great Allentown Fair	Aug. 1–9
Fayette County Fair, North of Uniontown	Aug. 4–9
Wayne Co. Fair, Honesdale	Aug. 4–10
McKean Co. Fair, Smethport	Aug. 4–10
Great Bedford Fair	Aug. 4–9
Great Dallastown Fair	Aug. 4–9
Union Co. West End Fair, Laurelton	Aug. 5–9
Butler Farm Show	Aug. 5–9
Green Co. Fair, Waynesburg	Aug. 5–9
Wolf's Corners Fair, South of Tionesta	Aug. 6–9
Farmers and Merchants Agricultural Show, Fairmount City	Aug. 10–16
Lebanon Co. 4-H Fair	Aug. 11–15
Dayton Fair	Aug. 11–16
Washington Co. Free Fair, Arden Downs Fairgrounds, Washington	Aug. 11–16
Huntingdon Co. Fair	Aug. 11–16
Morrison Cove Dairy Show, Martinsburg	Aug. 12–15
Youngsville-Warren Co. Fair, West of Pittsfield	Aug. 12–16
Adams Co. Fair, Abbottstown	Aug. 19–23
Lawrence Co. Farm Show, East of New Castle	Aug. 12–16
Juniata Co. 4-H Fair, Port Royal	Aug. 12–14
Potter Co. Fair, Millport	Aug. 12–16
Mifflin Co. Youth Fair, Reedsville	Aug. 13–16
Delaware Valley Fair and Farm Show, Milford	Aug. 13–16
Venango Co. Fair, Franklin	Aug. 13–16
New Stanton Farm and Home Fair	Aug. 13–16
Kiwanis Community Fair, Middletown	Aug. 14–16
Middletown Grange Fair, Wrightstown	Aug. 14–16
Westmoreland Co. Free Fair, Greensburg	Aug. 17–24
Carlisle Fair	Aug. 17–23
Somerset Co. Fair, Meyersdale	Aug. 17–22
Cameron Co. Fair	Aug. 18–23
Kutztown Fair	Aug. 18–23
Crawford Co. Fair	Aug. 18–23
Franklin Co. Fair, Chambersburg	Aug. 18–23
Fulton Co. Fair, McConnellsburg	Aug. 18–23
Tioga Co. Agricultural Assoc. Fair, near Whitneyville	Aug. 18–21
Harrold Free Fair, Greensburg	Aug. 20–23
Hookstown Fair	Aug. 20–23
Blue Valley Farm Show, Bangor	Aug. 20–23
Montour, DeLong Community Fair, West of Washingtonville	Aug. 20–23
Harford Fair	Aug. 21–23
Transfer Harvest Home Fair	Aug. 21–23
Centre Co. Grange Fair, Centre Hall	Aug. 22–28
Indiana Co. Fair	Aug. 25–30
Wattsburg Fair	Aug. 25–30
Bullskin Township Community Fair, Wooddale	Aug. 25–30
Scott Township Fair, Olyphant	Aug. 26–29
West End Fair, Gilbert	Aug. 26–28
Sewickley Community Fair and Farm Products Show	Aug. 26–29
Greene-Dreher-Sterling Fair, Newfoundland	Aug. 26–30
Big Knob Grange Fair, East of Rochester	Aug. 27–30
Allegheny Co. Fair and Western Exposition, Library	Aug. 27–Sept. 1
Rostraver Township Fair, Belle Vernon	Aug. 27–29
Sullivan Co. Fair, Forksville	Aug. 27–30
Great Stoneboro Fair	Aug. 28–Sept. 1
Bear Lake Labor Day Program	Aug. 29–Sept. 1
Juniata Co. Fair, Port Royal	Aug. 30–Sept. 6
Carbon Co. Fair, Lehighton	Aug. 31–Sept. 7
Cambria Co. Fair, Ebensburg	Sept. 1–6
Ox Hill Community and Agricultural Fair, between Home and Plumville	Sept. 1–6
Tioga Co. Fair	Sept. 1–6
South Mountain Fair, Arendtsville	Sept. 2–6
Waterford Free Fair	Sept. 3–6
Pymatuning Fair, Jamestown	Sept. 3–6
Spartansburg Community Fair	Sept. 4–6
Economy Grange Fair, Baden	Sept. 4–6
Jefferson Co. Town & Country Fair, Sykesville	Sept. 8–13
York Inter-State Fair	Sept. 9–13
Cochranton Community Fair	Sept. 10–13
Albion Area Fair	Sept. 10–13
Green Township Community Fair, Commodore	Sept. 10–13
West Alexander Fair	Sept. 10–13
Claysburg Community Farm Products and Flower Show	Sept. 11–13
Berlin Brothersvalley Community Fair, Berlin	Sept. 11–13
Falls-Overfield Fair, Dalton	Sept. 11–13
Gratz Fair	Sept. 14–20
Bellwood-Antis Farm Show, Bellwood	Sept. 16–18
Harmony Grange Fair, Westover	Sept. 17–20
Southern Lancaster Co. Community Fair, Quarryville	Sept. 17–19
Turbotville Community Fair	Sept. 17–20
Beaver Community Fair, Beaver Springs	Sept. 17–20
North East Community Fair	Sept. 18–20
Pennsylvania All-American Dairy Show, Harrisburg	Sept. 22–26
Williamsburg Community Farm Show	Sept. 22–25
Bloomsburg Fair	Sept. 22–27
Pennsylvania Black and White Show, Harrisburg	Sept. 23
Ephrata Fair	Sept. 24–27
West Lampeter Community Fair	Sept. 24–26
Oley Valley Community Fair, Oley	Sept. 25–27
Sinking Valley Community Farm Show	Sept. 25–27
Morrison Cove Community Fair, Martinsburg	Sept. 30–Oct. 3
New Holland Farmer's Fair	Oct. 1–4
Hollidaysburg Community Farm Show	Oct. 6–9
Manheim Community Farm Show	Oct. 8–10
Unionville Community Fair	Oct. 9–11
Tri-Valley Community Fair, Hegins	Oct. 9–12
Dillsburg Community Fair	Oct. 16–18
Pennsylvania Livestock Exhibition, Harrisburg	Nov. 8–15
Uniontown Poultry and Farm Products Show	Nov. 29–30
Pennsylvania Farm Show, Harrisburg	Jan. 12–16, 1970

NEW YORK

Trumansburg Fair	July 8–12
Afton Fair	July 13–19
Hemlock Lake	July 14–19
Ontario Co. Fair, Canandaigua	July 14–19
Allegany Co. Fair, Angelica	July 15–19
Onondaga Co. Youth Horse Show, Syracuse	July 19–20
Onondaga Co. Youth Fair, Syracuse	Aug. 2
Chautauqua Co. Fair, Dunkirk	July 21–26
Lewis Co. Fair, Lowville	July 21–26
Saratoga Co. Fair, Ballston Spa	July 21–26
Yates Co. Fair, Penn Yan	July 22–26
Clinton Co. Fair, Plattsburgh	July 25–30
Orange Co. Fair, Middletown	July 26–Aug. 2
Broome Co. Fair, Whitney Point	July 27–Aug. 2
Jefferson Co. Fair, Watertown	July 27–Aug. 2
Boonville-Oneida Co. Fair, Boonville	July 28–Aug. 2
Seneca Co. Fair, Waterloo	July 28–Aug. 2
Tompkins Co. Fair, Ithaca	July 28–Aug. 2
Caledonia-Livingston Co. Fair, Caledonia	July 29–Aug. 2
Orleans Co. Youth Fair, Albion	July 30–Aug. 2
Schuyler Co. Youth Fair, Montour Falls	July 31–Aug. 2
Chemung Co. Fair, Horseheads	Aug. 4–10

(Continued on next page)

Chenango Co. Fair, Norwich	Aug. 4–9
Cortland Co. Youth Fair, Cortland	Aug. 4–9
Genesee Co. Fair, Batavia	Aug. 4–9
Otsego Co. Fair, Morris	Aug. 4–9
St. Lawrence Co. Fair, Gouverneur	Aug. 4–9
Gouverneur Fair	Aug. 4–9
Oswego Co. Fair, Sandy Creek	Aug. 5–9
Greene Co. Youth Fair, Durham	Aug. 6–8
Cayuga Co. Youth Fair, Auburn	Aug. 7–10
Rockland Co. Youth Fair, New City	Aug. 8–10
Albany, Schenectady, Greene Cos., Altamont	Aug. 11–16
City of Schenectady, Altamont	Aug. 11–16
Cattaraugus Co., Little Valley	Aug. 11–16
Delaware Co., Walton	Aug. 11–16
Monroe Co. Fair, Henrietta	Aug. 11–16
Essex Co. Fair, Westport	Aug. 12–16
Niagara Co. Youth Fair, Lockport	Aug. 12–14
Herkimer Co. Fair, Frankfort	Aug. 13–17
Erie Co. Fair, Hamburg	Aug. 15–23
Sullivan Co. Youth Fair, Grahamsville	Aug. 15–16
Ulster Co. Fair, New Paltz	Aug. 15–17
Warren Co. Youth Fair, Warrensburg	Aug. 15–17
Franklin Co. Fair, Malone	Aug. 17–24
Steuben Co. Fair, Bath	Aug. 18–24
Palmyra-Wayne Co. Fair, Palmyra	Aug. 18–23
Wyoming Co. Fair, Pike	Aug. 18–23
Dutchess Co. Fair, Rhinebeck	Aug. 19–24
Cobleskill-Schoharie Co., Cobleskill	Aug. 19–24
Washington Co., Greenwich	Aug. 19–23
Madison Co.-Brookfield, Brookfield	Aug. 27–Sept. 1
Montgomery Co., Fonda	Aug. 27–Sept. 1
Rensselaer Co., Schaghticoke	Aug. 28–Sept. 2
Agr. & Lib. Arts of Rensselaer Co., Schaghticoke	Aug. 28–Sept. 2
Columbia Co., Chatham	Aug. 29–Sept. 1
Genesee Valley Breeders, Avon	Aug. 30–Sept. 1
Tioga County, Owego	Aug. 31–Sept. 6
Dundee Fair	Sept. 3–7
Queens, Nassau & Suffolk Cos., Bethpage	Sept. 21–29

NEW JERSEY

Cumberland Co. Fair, Millville	July 7–13
Monmouth Co. 4-H Fair, Freehold Raceway	July 10–12
Bergen Co. 4-H Fair, Hackensack	July 18–19
Cape May Co. 4-H Fair, Cape May Court House	July 24–26
Burlington Co. Farm Fair, Lumberton	July 24–26
Gloucester Co. 4-H Fair, Mullica Hill	July 25–26
Ocean Co. Fair, Lakewood	July 29–31
Passaic Co. 4-H Fair, Wayne	July 31–Aug. 2
Camden Co. 4-H Fair, Garden State Racetrack	Aug. 1–2
Sussex Co. Farm & Horse Show, Branchville	Aug. 4–9
Middlesex Co. Fair, East Brunswick	Aug. 5–9
Salem Co. Fair, Cowtown	Aug. 7–8
Atlantic Co. 4-H Fair, Egg Harbor	Aug. 7–9
Mercer Co. 4-H & Farmers Show, N.J. State Fairgrounds	Aug. 8–9
Somerset Co. 4-H Fair, West of Somerville	Aug. 13–15
Warren Co. Farmers Fair, Harmony	Aug. 13–16
Morris Co. Fair, Succasunna	Aug. 17–24
Essex Co. 4-H Fair, Roseland	Aug. 22–23
Flemington Fair	Aug. 26–Sept. 1
New Jersey State Fair, Trenton	Sept. 13–21

Kirby . . . . .

(Continued from page 19)

unchanged-to-lower prices on tomatoes for processing, have been factors inducing a number of growers to swing to sugar beets. In view of the new crop, extensive research and trial plots are being conducted by the Agricultural College.

WRONG METHOD

There is a right and a wrong way to do things, and county agricultural agent George Vapa, Dover, Delaware, is authority for the applied use of the wrong way. A backyard poultryman noted that one of his fowls was not eating properly. Fearing that it might be diseased, he decided that immediate action was necessary.

So he wrung the chicken's neck and brought it in to the county agent's office for a diagnosis. After an examination of the bird, the report came back . . . "Died of a broken neck!"

Having a problem in maintaining egg production? . . . are there sick birds in the flock? . . . Send them to the diagnostic laboratories in your state . . . without wringing their necks. They have methods of determining diseases before death.

DIRECT SEEDING

A new method of direct seeding of tomatoes for processors is underway at the South Jersey Research Center. The system involves covering the newly-planted seed with plastic. This accomplishes two things: (1) it permits early seeding, even in mid-April; (2) it protects the plants from late spring frosts and freezes.

The seed is sown in a shallow trench and immediately covered with plastic. This enables the sun to warm the soil and speed germination. As the plants reach four to five inches high, and after danger from late frost is past, the plastic is removed and the plants have already made a fast start. Costs are not known yet, but they may be less than for southern-grown plants plus the cost of setting.

An added feature of this method is that there is no shock from pulling and transplanting. Also, herbicides may be applied to the soil along with a part of the fertilizer, all of which adds up to a reduction in costs.

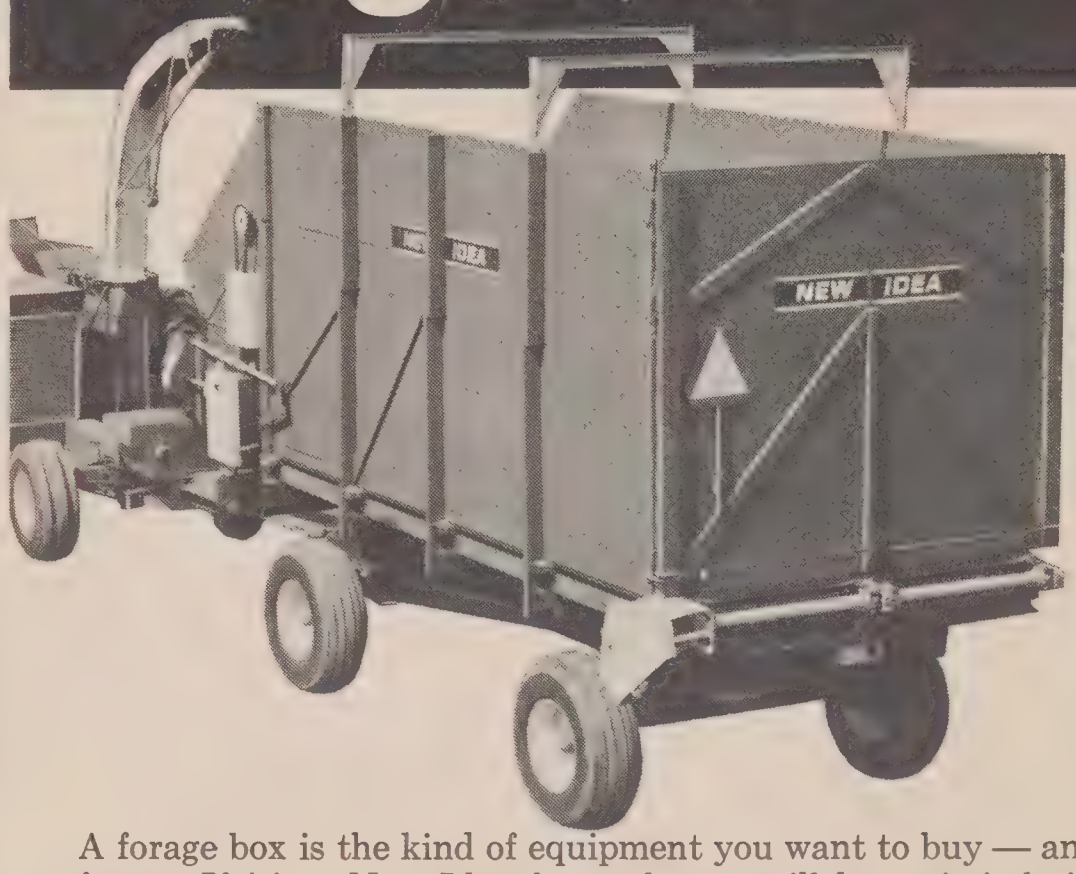
Going a step further, plants grown under plastic just might avoid severe damage from the Colorado potato bug and other pests that attack the foliage. It is still an experiment, but it looks good from what I saw.

Tomatoes in Bulk

This year will see a large portion of the tomatoes grown for the Campbell Soup Company being delivered in bulk; no more baskets or pallets if the experiment proves successful.

The tomatoes are poured into a specially-constructed truck body to a depth of 20 inches. Then a layer of deck boards are placed above the lower level, and another 20-inch layer added. This depth is comparable with the pallet bin that is most successful at some plants. On arrival at the processing plant, the front of the truck moves up a ramp, a tailgate is lifted, and the tomatoes float into the plant.

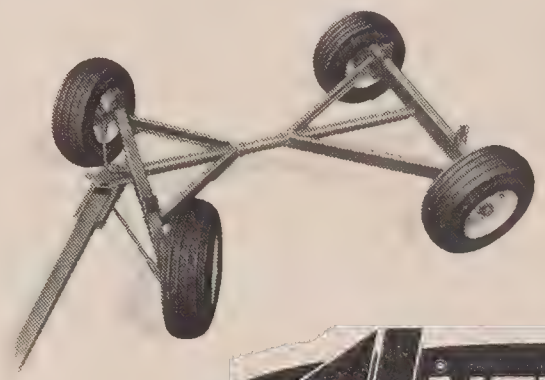
If you own a New Idea Forage Box, you can forget it!



A forage box is the kind of equipment you want to buy — and forget. If it's a New Idea forage box, you'll know it is built brawny to work harder, longer. Its rugged dependability is protected by the Avco New Idea full year warranty.

You'll have smooth, plug-free unloading with eight apron speeds. The control is located at the delivery end of the cross conveyor. No need to climb to the tractor throttle to regulate unloading speed. Cross conveyor is extra wide and extends 8-inches beyond the box side. Optional 48-inch conveyor extension is available.

Choose from either of 2 models — with up to 621 cu. ft. capacity. Select a 2- or 3-beater DeLuxe model with steel reinforced wood sides and bottom, all steel undercarriage and endgates — or Standard model with 2 x 4 stakes and wood undercarriage.



Running mate . . . You'll find the New Idea 7- and 10-ton heavy duty wagons ideal running gear for New Idea forage boxes. You'll get true trailing and long, trouble-free service.

AVCO NEW IDEA FARM EQUIPMENT

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LP-gas dryers let you harvest your corn when it's mature—even if it's wet. No waiting. No worry. The result can be a 10% net yield increase or more, as compared to field drying. And with controlled, forced-air LP-gas heat, your corn is dried evenly, automatically, perfectly. Losses due to moisture dockage are eliminated. So, store until the price is right, and ship your corn in peak condition. Ask your dealer about LP-gas dryers today.

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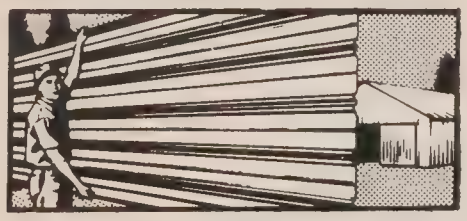
POWER UP YOUR FARM with PROTANE LP-GAS SERVICE
FIND US FAST IN THE YELLOW PAGES

Rust means more than just leaks.

It means hot livestock. Rust cuts roof reflectivity down to less than 10%. White paint can bring it back to 40%. But even that isn't as cool as a Kaiser Aluminum roof that keeps 60% reflectivity even when fully aged (keeps interiors up to 15° cooler on hot days). Kaiser Aluminum is simply better roofing and siding for your next farm building.

More affordable than rust!



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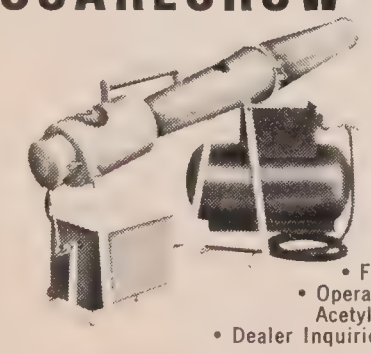

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MORE PRIZES!

After our May issue went to press, we learned that several additional prizes would be awarded state winners in the American Agriculturist–New York State Grange Yeast Bread Contest when the finals are held at Albany, New York, this fall. We know how excited you county winners must be at the prospect of taking home one of the marvelous grand prizes, as well as the many grocery prizes being given the top ten state winners.

General Aniline & Film Corporation will again give an Anscomatic 326 Camera Outfit for a grand prize, and **New York State Grange** has again selected a Singer Portable Zig-Zag Sewing Machine and a Singer Portable Television Set as the two grand prizes they will contribute to the contest.

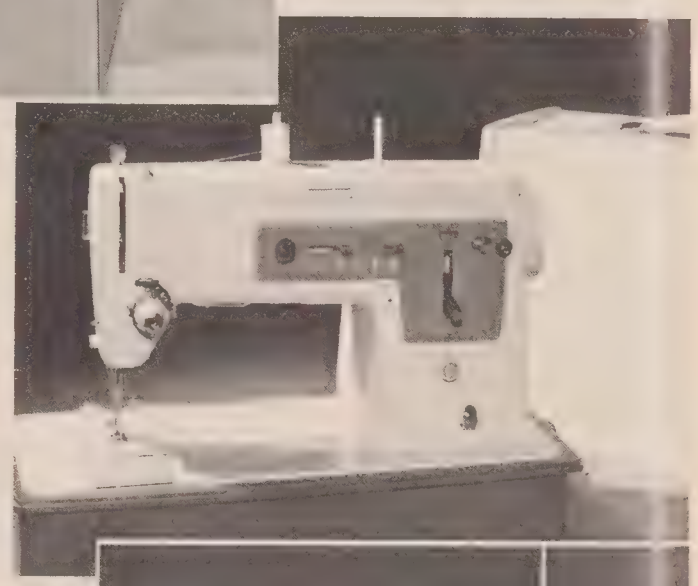
In addition to the Gift Packages **Standard Brands Incorporated** (makers of Fleischmann's Yeast) is giving the top ten state winners, they will also give $50.00 in cash, to be awarded as follows: 1st place winner, $25; 2nd place winner, $15; and 3rd place winner, $10.

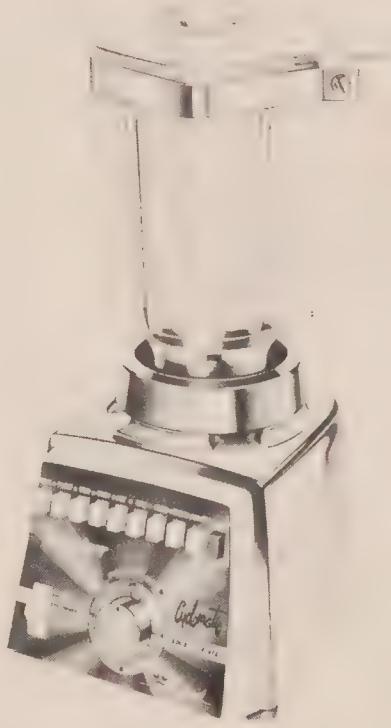
Also pictured is the 10-speed Osterizer Cyclomatic Blender being given as a grand prize by **International Milling Co., Inc.** We told you about this in our May issue, but did not receive the picture in time to include it in the story.

Again, we would like to express out appreciation to each company participating in this contest. We are very proud of the many fine prizes available for state winners this year, and we know they have much to do with the popularity of our contest in Granges throughout New York State.

Below — From New York State Grange: Singer Portable Zig-Zag Sewing Machine and Portable Television Set.

Above — From General Aniline & Film Corp.: 326 Anscomatic Camera Outfit. Below — From International Milling Co., Inc.: Osterizer Cyclomatic Blender.





SAFETY SURVEY

The New York State Advisory Council on Farm Labor Safety is planning surveys of a sample of Empire State farms during 1969. Headed by chairman Richard T. McGuire, Cambridge, New York, the organization was created by the Legislature in 1968 to study farm safety . . . and to make recommendations to the Commissioner of Labor.

The survey, to be taken on a random sample of farms, will provide information on existing safety problems . . . and offer a basis for recommendations of improvement. Volunteer enumerators will gather the information.

Farming ranks as one of the most dangerous occupations . . in fact, the rate of fatalities per thousand workers places it third, behind mining and construction. Farmers make up only six percent of the nation's work force, but they account for almost 25 percent of the on-the-job fatal accidents.

LIVESTOCK MART

ANGUS

BUY AND TRY Wye Plantation Aberdeen-Angus frozen semen from Advanced Register P.R.I. sires officially gaining over four pounds per day or whose 365 day weights are above 1200 pounds. (Performance tested sires always for sale.) Wye Plantation, Queenstown, Maryland 21658. Telephone:- 301/827-7166; 827-7160.

ANGUS—REGISTERED, SUITABLE for 4-H classes. Also well bred young bulls and heifers suitable for any breeding herd. Mohawk Farms, Bob Hartley, manager. Canajoharie, New York. 518-675-5262.

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FRIDAY, JULY 11, at 12:30 P.M.

A richly bred herd backed by 41 yrs. of Herd Test records. Great cow families. 22 COWS—10 BRED HEIFERS — 8 YEARLINGS — 10 HEIFER CALVES. Majority are daughters or granddaughters of the Breed's most popular Approved sires. Four fresh in May, 3 due in July, 2 in Aug., 1 in Sept., 6 in Oct. Foundation cattle, many right for fall shows. Last Herd Avg.: 12,833 M 4.2% 533 F. Vaccinated, Accred., Certified, tested within 30 days. For Catalog Write TOM WHITTAKER, Sale Mgr. BRANDON, VT.

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MEADOW VIEW CHICKS—Shaver Leghorns, Harco Sex-links, Lawton Buffs, Cornish Cross meat birds. Also started pullets. Henry M. Fryer, Greenwich, N.Y. 12834. Phone 518-692-7104.

BIG WHITE LEGHORNS, white — barred rocks, New Hampshires, Cornish Rocks, ducklings, bronze and white turkey poults. 35 breeds. Free Catalog. Mt. Healthy Hatcheries, Mt. Healthy, Ohio.

HI-PRODUCTION LAYERS. "Rugged as a Mule" white egg hybrids and brown egg hybrids that live, lay and pay. Also top notch White Leghorns and Buff Sex Links. Pullets as low as $27.00 per 100. Broadbreasted Cornish meatmaker cross—$10.00 per 100. Free catalog. Noll Farms, Kleinfeltersville, Penna. 17039.

PROFIT POWERED extra heavy laying White Leghorns, Harco Reds, Buffs, Black Sex Link Pullets. Extra heavy breeds; Vantress, White Mountains, Silver Cross. Cockerels weigh 14 lbs. Prepaid, insured delivery. Circular. Strickler Poultry Farms, Newmanstown 3, Pa. 17073.

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ROCKS, REDS, CORNISH $3.85-100. Large Jumbo White Rocks $6.40. Other breeds $1.45 to $5.45. Pullets $12.20. Before you buy, compare our prices. Guaranteed savings. Customers choice of breeds shown in terrific big free catalog. Shipment from hatchery your section. Atlas Chick Company, Home Office, 2651 Chouteau, St. Louis, Missouri 63103.

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BORDER COLLIES. Imported Stock personally selected in Scotland. Dunsmore Farm, Swanton, Vermont.

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4 to 5 weeks old		**10 weeks old**	
Holstein Heifers	55.00	Holstein Heifers	77.50
Holstein Bulls	55.00	Guernsey Heifers	75.00
Guernsey Heifers	50.00	Holstein Bulls	75.00
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Continued on Page 27)

DELMARVA BOOMING

POULTRY industry housing construction is enjoying a modest boom on Delmarva this year, a recent survey indicates.

By the end of 1969, broiler growers on Delmarva will have built enough new poultry housing to boost production of chickens 12 to 13 million head per year, according to a survey of the major builders of such housing.

Ray Lloyd of Georgetown, Extension Poultryman for the University of Delaware, was responsible for the survey. It included a count of new breeder flock housing for chickens that produce hatching eggs, as well as the more familiar broiler housing for market chickens. Covered by the survey were the major builders in leading poultry counties of Delaware, Maryland, and Virginia.

Most of the broiler flock housing underway ranges in size from 12 to 30 thousand birds-capacity per house, with the breeder house sizes accommodating some 5 to 6 thousand laying hens on the average, the builders reported.

Windowless

Lloyd said that there was a strong trend toward windowless houses and that builders reported these were costing little more if any than the conventional windowed houses despite the heavier investment in ventilating fans and controls required. Reason, said the builders, is that the windowed houses require a lot of expensive and time-consuming framing and fitting of windows and roof ventilators.

Costs for materials are rising, the builders reported, but modern building methods have kept down the increased housing cost over that of five years ago to a fairly modest increase of 10-to-30-cents-per-bird capacity. The best houses now cost only 30 to 40 cents more per bird-capacity than they did a dozen years ago, Lloyd noted, yet they are at least 70 percent more efficient where demands on growers' time are concerned.

More Net

The new windowless houses, he said, were making it possible to grow chickens at a cost of seven-tenths of a cent per pound less than in conventional houses. As a result, some of the windowless houses are netting their owners $30 to $40 more per thousand chickens grown than the conventional houses, Lloyd reported. This is the same figure reported two years ago in a study made by the University of Delaware under the sponsorship of the Delmarva Poultry Industry Association, he said.

As a result of the recent housing survey, Lloyd expects that from 160 to 175 new poultry houses will be built on the 'Shore this year. They will represent an investment by growers and poultry companies of some $4,750,000.

Almost without exception, Lloyd reported, the broiler houses underway or planned are fully insulated, ventilated, and automated.

Journey To Day Before Yesterday

By E. R. Eastman

Memory has a happy trick of remembering the good times and forgetting the bad. Readers write in constantly telling how "they have lived and done so many things described in this book," and what fun it is to recall many events that they themselves had almost forgotten.

For a copy of this nostalgic book, well-bound and illustrated, send check or money order for $7.30 (New York State tax included) to American Agriculturist, Book Department, Box 370, Ithaca, New York 14850.

'ROUND the KITCHEN

with ALBERTA SHACKELTON

JUNE IS "Dairy Month," but milk and dairy products know no time or season. Whether young or old, we need them every month, every day. And what good cook could manage tasty meals for her family without milk?

Does every member of **your** family get enough milk every day as a beverage or in foods? Children under 9 years require 2 to 3 cups daily; children 9 to 12 require 3 or more; teenagers 4 or more; adults 2 or more; pregnant women over 19 require 3 or more, and nursing mothers over 19 require 4 or more cups.

New Forms of Milk

Are you confused by the growing number of modified and even imitation milk products on food market shelves and in the dairy cases? Here are a few questions and answers about some of these products.

How does skim milk (available in both fresh and dried form) **differ from regular homogenized whole milk?** Skim milk, also referred to as fat-free milk, is whole milk from which the butterfat has been removed and therefore lacks the fat-soluble vitamins A and D. Much of the fluid skim milk is sold as "modified skim milk" and ir skim milk to which have been added vitamins A and D only or, more often, fat-free powdered skim milk as well.

Certain dairies may then also add small amounts of butterfat or whole milk to a maximum of 2% fat content to make the skim milk product taste more like whole milk. The product is marketed under a fancy brand name like Sealtest's "Light and Lively," Dairylea's "Dairilean," or another dairy's "Aktiv."

What are Filled and Imitation Milks? These are marketed in the same type carton as regular milk but cost less per quart. **Filled Milk** is a product made by combining vegetable fats or oils other than milk fat (usually coconut oil at the present time) with fluid skim milk and sometimes dry skim milk (or with dry skim milk only plus an additional source of protein) in semblance of milk. It may be fortified with minerals and vitamins.

Imitation Milk is a non-dairy product, being a mixture of vegetable fat and a protein product like soybean protein and other substances. In New York State it must be specially labeled as "Melloream," a "vegetable-oil blend," "not a dairy product," or "contains no milk or milk fat."

How does flavor and nutritional value of filled and imitation milks compare with regular whole milk? The flavor of filled milk is considered similar to whole milk flavor. For most people (except infants, young children, and persons on fat-modified diets prescribed by their physicians to lower blood cholesterol), most authorities agree that filled milk is an adequate nutritional substitute for whole milk.

Imitation milks, as they have been appearing on the market, are not in any sense a nutritional substitute for regular milk, as they are very low in protein, calciud, and vitamins A and D. Both filled and imitation milks contain about the same number of calories as whole milk.

Photo: National Dairy Council

Cool, refreshing punch is the answer to easy entertaining.

Two Dairy Month Recipes

A cool, refreshing punch, pretty to the eye and tempting to the taste, will be welcome at a tea party, bridal shower, or graduation gathering during the coming warm days. The following Pastel Punch provides an extra bonus of good milk nutrients.

PASTEL PUNCH

- 1 can (6 oz.) frozen pineapple juice concentrate, thawed
- 1 can (6 oz.) frozen orange juice concentrate, thawed
- 3 cups water
- 3 cups milk
- Dash salt
- ¼ cup sugar
- 1 quart lime sherbet

Mix together in a large bowl the pineapple and orange juice concentrates, water, milk, sugar and salt; stir until sugar is dissolved. At serving time, spoon sherbet into punch and stir slightly. Serve very cold, surrounded with crushed ice, if possible. Makes about 20 half-cup servings.

Note: To give a more "pastel" effect, you may wish to spoon several colors of sherbet into the punch, as raspberry, orange, and lime. And you can, of course, use any favorite combination of fresh, frozen or canned fruit juices. In any case, finger sandwiches, butter cookies or petits fours make good go-alongs.

Cottage cheese, teamed with an assortment of colorful fruits, is popular year-round but especially welcome on warm days. The high protein and low calorie (one-half cup contains only 120 calories) content of cottage cheese makes it an excellent weight watcher's food choice.

COTTAGE CHEESE FRUIT PLATE

- 2 pounds creamed cottage cheese, large or small curd
- Lettuce cups
- Pineapple and apple slices
- Pear and peach halves
- Grapes, raspberries, strawberries
- Mint leaves

Pile cottage cheese in center of a large attractive crisp-greens-covered plate or platter. Arrange fruit in spiral form around cottage cheese as shown in picture. Garnish with mint leaves. Serve with orange, banana-nut, or date-nut bread (Melba toast or rye wafers for the dieter) and a tall glass of milk. Serves 8.

How's Your Weight?

Nowadays "losing weight" appears to slip into every conversation wherever friends gather. And there is always someone who claims to have just the right diet. More often than not it is another "crash diet" which may or may not bring about quick weight loss and in some cases may be really dangerous. Such diets are usually low in calories but also low in most or all of the essential nutrients needed for good health.

Calories are a first consideration in planning meals for weight control, but there is more to food than calories. It also should furnish the vitamins, minerals, and proteins needed to build the body and keep it in good running condition.

A reliable food plan is the best way to choose foods that supply the needed nutrients. Such a plan is the USDA's Daily Food Guide which shows the kinds and amounts of foods to be chosen from four groups — milk group, meat group, vegetable-fruit group, and bread-cereal group. The following USDA menus show how easy it is to select the right kinds of food to provide only 1200 calories per day. Note that each set of menus contains the equivalent of at least 2 cups skim milk.

1200 Calories

Breakfast

Orange juice	½ cup
Soft-cooked egg	1 egg
Whole-wheat toast	1 slice
Butter or margarine	1 teaspoon
Skim milk	1 cup
Coffee (black), if desired	

1200 Calories

Breakfast

Grapefruit	½ medium
Wheat flakes	1 ounce
Skim milk	1½ cups
Coffee (black), if desired	

Lunch

Sandwich:	
Enriched bread	2 slices
Boiled ham	1½ ounces
Mayonnaise	2 teaspoons
Mustard	
Lettuce	1 large leaf
Celery	1 small stalk
Radishes	4 radishes
Dill pickle	½ large
Skim milk	1 cup

Chef's salad:	
Julienne chicken	1 ounce
Cheddar cheese	½ ounce
Hard-cooked egg	½ egg
Tomato	1 large
Cucumber	6 slices
Endive	½ ounce
Lettuce	⅛ head
French dressing	2 tablespoons
Rye wafers	4 wafers
Skim milk	1 cup

Dinner

Roast lamb	3 ounces
Rice, converted	½ cup
Spinach	¾ cup
Lemon	¼ medium
Salad:	
Peaches, canned	1 half peach
Cottage cheese	⅓ cup
Lettuce	1 large leaf

Beef pot roast	3 ounces
Mashed potatoes	⅓ cup
Green peas	½ cup
Whole wheat bread	1 slice
Butter	½ teaspoon
Fruit cup	
Orange	½ small
Apple	½ small
Banana	½ medium

Between-Meal Snack

Apple 1 medium

Mirandy

You CAN Grow Roses!

by Nenetzin R. White

Everyone wants to grow roses — you **can,** and the blossoms can be as beautiful as the pictures. In the past, there have been some drawbacks and problems, but these can now be controlled. New ways of planting, long-lasting organic fertilizers, plus new and better fungicides will help anyone who has the desire, ambition, and a sunny area to grow beautiful roses.

First, let's talk about planting. No hybrid tea roses and very few floribundas will do well in wet, heavy soil. The bed must have adequate drainage and a good soil mix (usually sand, peat and topsoil). Install drainage or use raised bed plantings. Large containers with adequate drain holes are also very suitable. Your roses must also have as much sunlight as possible, and morning sun is the most important. Organic fertilizers are excellent; they're long lasting and won't burn.

One of the reasons I write, do radio broadcasts and an occasional television program is because I love plants. I enjoy trying to help make your gardening successful and as easy as possible. It just makes my heart ache to see a nice young couple in their new home, planting hybrid tea roses around the foundation of the house!

Frequently foundation areas have rubble such as wire, concrete chunks, old plastic and such, and sometimes contain toxic material. Topsoil is often non-existent in these areas, and if the soil is clay, the couple is putting rather demanding plants in soil which water will not permeate. Small wonder that such people are discouraged from growing roses! Prepare a proper area for these great flowers (they seem to do best in groups) and mulch for weed control, as well as to cool the roots in summer.

Insect control on roses is relatively easy; a little insecticide can be mixed with the fungicides when necessary. Use the least toxic material, always read the label, and handle with care. Rose fungus diseases used to be a bugaboo, but today's new products control black spot and powdery mildew easily. Fungicides must be used weekly during overcast, damp weather, and don't try to grow roses without these very important products.

Black spot starts as small lesions on leaves and stems, growing in size as the fungus develops. If unchecked, this will usually defoliate the plant. Black sport is spread by wind and rain, so spraying (found to be much more effective than dusting) should be done at least once a week during the rainy season, starting as soon as you can cut back the canes. Do also spray the ground where spores winter over and develop.

The newest recommendations are manab (Manzate or Dithane M22) folpet (Phaltan), Daconil and Du-Ter. Use these early in the season in the recommended solution (more will burn), and later you may be able to use them half strength. Controlling black spot will not only give you attractive plants, but will also produce larger, hardier plants.

Powdery mildew, another fungus, makes white or grey moldy spots on leaves, branches, buds, etc. This stunts and distorts the rose bush, weakening it and giving it a very displeasing appearance. This fungus thrives on high humidity, but fortunately good control is now available. Spray according to directions with Actidione PM or Parnon.

All these controls are available to help you grow good roses, but without taking time to use recognized fungicides and insecticides, you will have poor results or will even fail. The newer and better fungicides are fairly expensive, so don't start your rose plantings with just one or two plants. Put your roses in a bed, or if you don't want to cut up your yard, put some groupings in your borders where they will get good air circulation.

Helen Traubel

Photo: Kelly Brothers

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MASTITIS COMMENT

Dr. John Mettler, who writes the veterinary column appearing in American Agriculturist, reports on recent remarks by Dr. W.C. Whittlestone, famed New Zealand dairy scientist. Dr. Whittlestone mentioned the following conclusions, based on his own research, and research by others:

1. The most important practice in control of mastitis is proper hygiene. Dipping of the teats after milking is the most important step in a complete hygiene program.

2. There are many things, both in milking and in other ways that cows are cared for, that can influence the number of leucocytes in a cow's milk. A high leucocyte count does not always mean mastitis. In fact, a cow **must** have some leucocytes to combat mastitis. If we cull all our cows that produce a normal amount of leucocytes, we may be destroying the very cows that will milk for years without mastitis.

3. Dexterity in machine milking is more important than fancy equipment. As an example, a clumsy milker can cause a severe dip in vacuum every time he changes teat cups, and cause milk to flow backwards in a pipeline and reach the teat ends of other cows being milked.

4. Slow milking does more harm than over-milking (leaving machines on too long), though both can cause an increase in mastitis.

5. High pipe lines cause more mastitis than low lines.

6. Cows are easier to milk, and are more content, in herringbone milking parlors than in other styles.

7. Cows should not be moved from one group to another. Each time a cow is changed from her normal herd, her leucocytes go up and her production goes down.

ADA FORMS DRINC

The American Dairy Association has formed a new organization designed specifically to conduct research and development programs for the dairy industry. To be known as Dairy Research, Inc. (DRINC), it will be operated by ADA as a subsidiary.

Northeasterner Robert Turner of Horseheads, New York, is presently vice-president of the ADA. Fellow northeasterner James Donnan, Galway, New York, is chairman of the Board of the National Dairy Council. The NDC had indicated interest in DRINC as a possible vehicle for stepped-up nutrition research, but details of their involvement have not been worked out.

ADA has announced a goal of $5 million for dairy research and development within the next few years, and a goal of approximately $18 million by 1975.

FARM VACATIONS

Rand McNally & Co. has published a 130-page "Farm and Ranch Vacation Guide." It's a guide to rural vacationing at recommended farms, ranches, and lodges in 50 states and Canada . . . a wealth of information for anyone who enjoys rural areas.

Available for $1.95 at news stands . . . or write Farm and Ranch Vacations, Inc., 36 East 57th St., New York, N. Y. 10022.

This scene from the 1968 Empire Farm Days shows only a fraction of the equipment, people, and excitement! The 1969 event is scheduled on the Piffard Farm owned by Elm Place Angus, headquartered at Avon, New York. Farm Days site is near Retsof . . . watch in future issues of AA for a map and more details.

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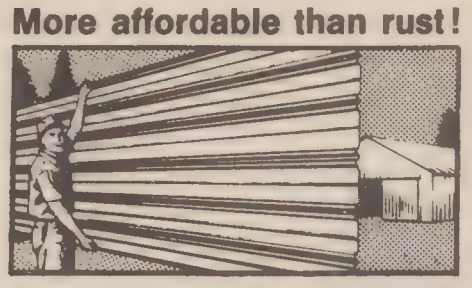

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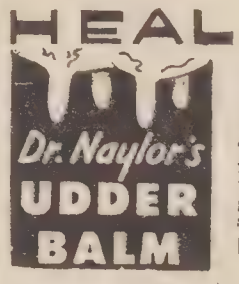

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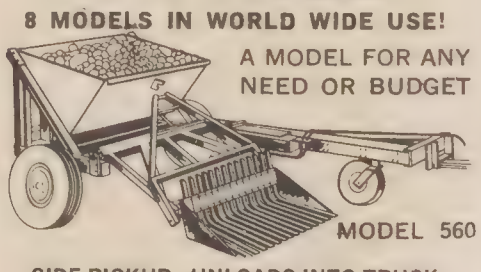

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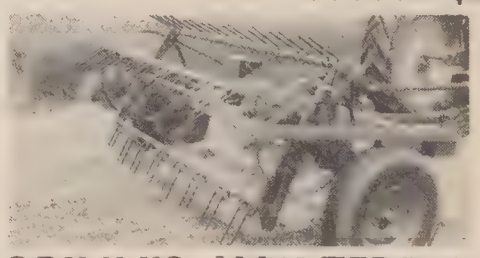

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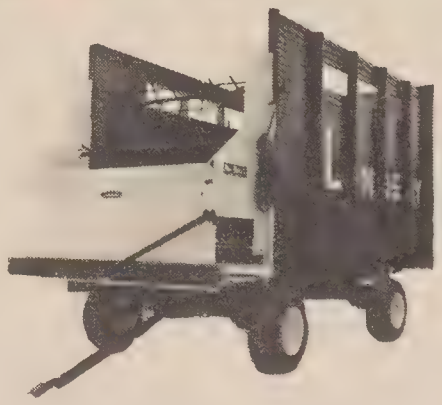

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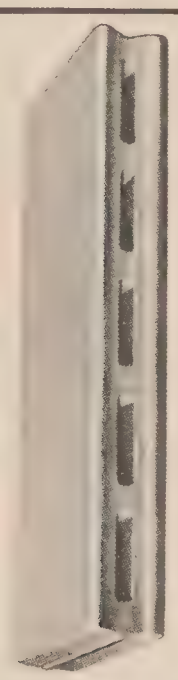

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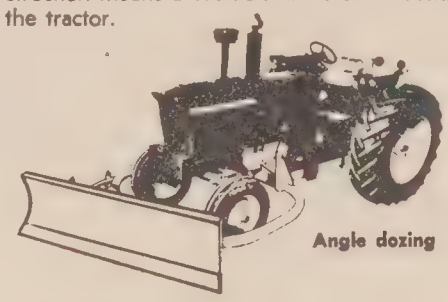

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ANY TOUR with American Agriculturist and Travel Service Bureau is a thrilling experience, but we think there is something absolutely irresistible about our **"Journey To Antiquity,"** a wonderful trip which includes the Adriatic Coast of Yugoslavia and historic Greece, plus a week-long luxury cruise of the Greek Islands and Turkey. By using a sleek Pan American jet, we can do all this in just three weeks, **September 16 to October 7.** Here very briefly is the schedule for this fascinating, once-in-a-lifetime vacation.

Belgrade — Sightseeing in Yugoslavia's capital city will include Kalemegdan Fortress with its Roman Wall, probably dating back to the 3rd Century, Mount Avala with a fine view of the Danube and Sava Rivers, the University, and National Museum.

Dalmatian Coast — We visit the picturesque town of **Dubrovnik,** surrounded by well-preserved walls, towers and gates, also Kotor, Cetinje, Budva, and Tivat. One of the most interesting places on our whole trip is the hotel-town of **Sveti Stefan.** Once a pirate nest, later a fishing settlement, it is now, in its entirety, a hotel. Connected to the mainland by a narrow causeway, it is surrounded by a clear sea with spacious beaches.

Greece — Beautiful, classical Greece! After an afternoon in **Athens,** we start a four-day journey into the heart of the Peloponnesus, Greece's ruggedly beautiful farming country. On this trip we visit **Cornith, Nauplia, Olympia,** the region around Mt. Parnassus, and **Delphi.**

Returning to Athens, we'll see the National Library, University, Royal Palace, and Olympic Stadium, also of course the mighty Acropolis with its Theater of Dionysus and Temple of Diana.

Aegean Sea Cruise — The luxury ship "Stella Oceanis" will be our home for a week, as we tour the delightful islands in the Aegean Sea. Our first stop is at Heraklion, capital of **Crete,** largest of the Greek Islands. The Museum of Heraklion contains relics of the Minoan civilization, dating back some 5000 years.

Next comes **Santorini,** a volcanic island of savage and picturesque beauty, believed to be the legendary Atlantis. On the Island of **Rhodes,** we'll see the spot where it is believed the famed Colossus stood, also well preserved buildings dating back to Crusader days.

Efessos in Turkey is believed to have been built by the Amazons about 2000 B.C. After seeing the many interesting places here, we sail toward the Dardanelles and arrive at **Istanbul,** "Pearl of the Bosphorus." Istanbul has 500 mosques and innumerable palaces of the Sultans. We'll see the Basilica of St. Sophia, the famous Blue Mosque, and a 6000-piece collection of Chinese porcelain dating back to the 9th Century.

Leaving Istanbul, we visit two famous islands of the Cyclades, each with its own individual charm. **Delos** has exquisite architectural remains of temples, theaters and mosaics. **Mykonos,** a sophisticated international resort, is an island of white houses and windmills. It attracts artists from around the world.

We have one final day in Athens before leaving for home. A fitting climax to the entire vacation is the "Sound and Light Spectacle" that evening. Part of the glorious history of Greece is enacted in sound, while various-hued lights play upon the magnificent Parthenon and other buildings on the Acropolis. This is an experience, you'll remember always!

Like all American Agriculturist tours, this will be an escorted, all-expense trip, with everything included in the price of your ticket — transportation, hotels, sightseeing, baggage handling, all meals (except beverages at lunch and dinner in Europe), and all tips.

Turn back the clock and for three weeks enjoy a "Journey To Antiquity." Mail the coupon today, and we'll be happy to send you the illustrated, day-by-day itinerary which gives complete cost information.

Other Tours

We have fine groups signed up for all our summer tours, but there is still some space available on the following:

Heart O' The West Holiday, August 2-24. Some of the places included in this trip are the Black Hills, Yellowstone, Grand Teton, Bryce Canyon and Zion National

(Continued on next page)

Dollar Guide

For The Northeast Farmer

U.S. FARMERS are putting over 40 million crop acres into government diversion programs, around 8 million more than a year ago. In New York State, 20,450 farmers have signed up for the 1969 Feed Grain Program.

TO BREAK IN a new saw chain, first soak the chain in oil before putting it on the saw, advises Omark Industries. Put it on the bar and properly tension it. Now start the saw and let the chain run slowly around the bar at idle speed for about five minutes to give the chain parts a chance to line themselves up with the bar groove and sprocket. Now make a few easy cuts, running the saw at no higher than half throttle, and applying oil liberally as you work. Stop the saw, let the chain cool, and then retension and re-oil.

USDA ACTION so far on price supports indicates no intention to push them higher, but rather to keep farm prices steady and, perhaps, so supports do not interfere with play of supply and demand.

LUMBER PRICES are up sharply. If you own a woodlot you might consider cutting. Why not send to Information Division, U.S. Forest Service, Washington, D.C. 20250 for free copies of Misc. Pub. No. 1086, "Demand and Prices for Forest Products," and Report C-1, "Lumber and Plywood Supply Situation."

GOVERNMENT ATTITUDE on pesticides seems to be changing toward more caution, more regulation, stricter enforcement. It's extremely important to follow directions on the container.

CONGRESS is taking a close look at "tax loss farming," whereby business men deduct farm losses in making tax returns. Also talks about closing other loopholes which permit men with large incomes to reduce or escape taxes.

TITLE of important bulletin for poultrymen is "Approaches to Supply Management for the Egg Industry." Write for it to your state college of agriculture.

PORK SUPPLY will be higher for rest of year than in 1968. However, demand is also higher, and hog prices are expected to be a little above a year ago. Feed costs are expected to be close to last year's prices for several months.

Clock . . . . .

(Continued from page 30)

Parks, the Grand Canyon, Pikes Peak and Denver.

Our summer **Alaska Holiday** from August 2 to 23 takes us into the heart of Alaska in addition to the beautiful Inside Passage Cruise. A few highlights of this wonderful vacation are Butchart Gardens and Victoria, Juneau, Mendenhall Glacier and lovely Auke Lake, Skagway, Whitehorse, Fairbanks, Mt. McKinley National Park, Anchorage, the Matanuska Valley, plus an optional side trip to Nome and Kotzebue for those who wish to cross the Arctic Circle and see a large Eskimo village in operation. We think this is a very outstanding summer vacation, and if you have never visited our 49th State, it is one you won't want to miss.

Fall tour in addition to Journey To Antiquity is a **Grand European Holiday** from September 11 to October 22, featuring luxury travel on the new Queen Elizabeth 2. We will see many of the most famous sights in England, Holland, Germany, Austria, Italy, Switzerland, and Belgium.

Gordon Conklin, Editor
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Ithaca, New York 14850

Please send me without obligation on my part, the following tour itineraries:

So. Amer. Circle Cruise____ Canada-Bermuda Cruise____ Fall Foliage Tours____
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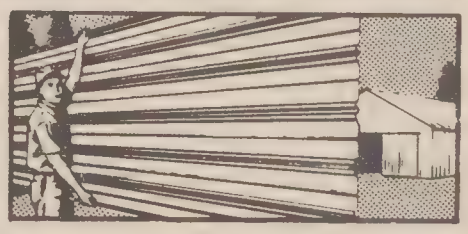

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Ed Eastman's Page

IS CULTIVATING NECESSARY?

My father did not believe that a corn or potato crop was properly cared for without at least three times cultivation. June was cultivating month. No sooner did the crops poke through the soil than it was time to start the cultivation. I can see father yet with a one horse cultivator, loaded with stone, while father bore down on the handles with all his strength.

I wish I had a dollar for all the miles I have followed a one horse cultivator when I was a boy. It is not a pleasant thought to know, in the light of today's knowledge, that father and I . . . and millions of others . . . probably did much harm by cultivating so deep that we cut off many of the crop roots.

The late George Warren, famous economist, went to the other extreme when he claimed that most cultivating did more harm than good.

Probably the real answer lies somewhere between the two extremes of too deep cultivation and none at all. One of the purposes of cultivating, of course, is to control weeds, which with today's chemical weed control is not necessary.

But there still remains the problem of maintaining a loose, friable soil, especially if there is any clay in it. It always seemed to me that I could see a crop fairly jump after the soil had been loosened by a light cultivating. What do you think?

BETTER MAKE SURE

Short of death itself, what is more tragic than a farm fire? Within minutes the work of a lifetime can be reduced to ashes, and perhaps somebody killed or terribly hurt.

With the thought in mind of what a fire could do to you and your family, why not take a few moments right now to check your own premises for fire hazards.

For example, have you kept loading up your electrical wiring until you may be on the danger point? Are lightning rods grounded? Are old rags, piles of paper, defective chimneys, and matches within the reach of children?

I am sure you will rest better tonight by making sure today that you are, as far as possible, safe from fire.

SHORTENING MILES

I have often wondered how many miles a woman walks in a year in a large, unhandy kitchen. If you have such a kitchen, maybe a little planning can shorten those miles and still keep the farm kitchen the most livable room in the home. Small kitchens can also be reorganized to save steps.

Here is how Mrs. Arthur Locke of Laconia, New Hampshire, did it, and still had her big livable kitchen:

"Some years ago I found myself queen of an old-fashioned kitchen in the country. I crossed the room fifty times to prepare a meal. After several weeks, I awoke.

"Sinks can't be moved at woman's whim, so I had the oil range moved to the side of the sink, and the electric refrigerator to keep them company. I ransacked a junk room. The lower four feet in front of the group and facing it became a storage for pans and kettles. A dropleaf table with one leaf gone, end to end to the cupboard, with the leaf away from my sink, gave me a serving space. Later, I covered both with a bit of lineoleum left over from a long-forgotten day. Bribed with an apple pie, one of the men affixed legs of a card table to the free side of the leaf. Set up, it became a busy work table or snack bar.

"From the attic, I brought a small piece . . . which may have once been a night table . . . and with it backed against the end of the table, I had a spot for toaster, cookbooks, etc.

"One stormy day, my husband came in with a part can of paint. While I finished frying the doughnuts, my makeshift divider turned into a unit as neat as any catalog offered, *and not one penny from the sugar bowl!*"

"IT IS PRICELESS"

"I just had to write finally and tell you how much I enjoy your page in American Agriculturist.

"I fully agree with you about taking God out of the schools. When you take God out of everything, you have nothing left but one big mess.

"I cherish your book, 'Journey to Day Before Yesterday'. Both my grandmothers are gone now but your book brings back so many wonderful hours when I listened to them tell of the old days. Your book is priceless to me.

"Thank you so much for writing it." —*Mrs. B. K.*

Every mail brings letters like this one and they make my work very much worthwhile. Orders for the book continue to come to American Agriculturist every day.

I am very proud to have "Journey to Day Before Yesterday" in so many homes. Not only does it help people relive happy memories, but also it helps young people to know what life was like when grandpa and grandma were young.

One thing you can be sure about any of my books and that is that there is not a single word in any of them that make you ashamed to have any of your family read.

To get a copy write to American Agriculturist, Department Book, Savings Bank Building, Ithaca, New York 14850. The cost of the book is $7.30, including tax.

SUCCESS DEPENDS ON YOU

By the time you read this I hope enough dairymen have approved a deduction from their milk checks to give American Dairy Association and the Dairy Council enough money to make a real showing in advertising milk and its by-products.

Eighty-five percent agreement to the deduction by dairymen under the New York-New Jersey milk order would provide $2,800,000 for advertising. The United States Department of Agriculture says this would be enough to increase milk sales four-and-a-half percent; this would solve the surplus problem.

Every large business in America except milk depends entirely on advertising for its sales and for its success. Why do we wait until substitutes ruin our markets?

FOOLISH CONSUMER

Much research is needed to help fruit growers find better ways of harvesting their crops mechanically. The labor problem is constantly growing more difficult. A grower may have a good crop all ready to harvest and then he is stopped right there because he can't get help to gather it or because it costs so much to hire hand labor.

Progress has been made in harvesting hay and the grain crops, but fruit picking lags behind because the problem is more difficult. An example in point is the foolish, unfair boycotting of California grapes.

The grape grower is caught in a squeeze. He either has to let his crop rot on the vine or pay wages that eat up the profits. What the consumer doesn't realize is that she is really hurting herself by boycotting grapes.

THROW THE SPENDERS OUT!

An old lady was complaining bitterly because she didn't get enough relief or social security money to live decently. A friend asked her where she thought she could get more. With emphasis she replied, "From the government, of course. They have lots of money!"

What the lady did not realize is that every cent of government money does not come from the government itself, but from the taxpayers after the government has taken out a generous slice to pay its great army of employees.

In thousands of cases people now on relief would not be if the government hadn't eaten into lifetime savings with taxes, and if the government had not caused inflation by extravagant spending so that the necessities of life cost two and three times as much as they did not so long ago. It is tragic that there are now so many people in financial trouble who worked and saved for a lifetime so that they would have enough to take care of them and be independent in their old age.

I have always been for progress and new projects in my own personal life when I had enough money to pay for them. Not so Uncle Sam. He spends **our** money whether we can afford it or not. We are fast becoming a socialistic welfare state, with incentives, ambition and drive to work and save gone with our own money controlled by politicians. They are never satisfied. Jumping at you in every newspaper are headlines demanding more billions and more millions for taxes, taxes, taxes . . . to support people some of whom won't work for themselves, and for such projects as "the Great Society."

What is the answer? Watch who they are and throw the spenders out. Sometime you will get mad enough to do it; I hope it won't be too late.

Ask your farm organizations to fight projects that can be left until there is money to pay for them. That is the way **you** have to do when you want something and can't pay for it.

EASTMAN'S CHESTNUT

My friend, Charles E. Truscott of Oneonta, New York, sent me this one. It gave me a laugh, and I think it will you. Here it is:

"Once upon a time Thor, the god of thunder and lightning, came down to earth, and he looked around and noticed that most of the humans were riding horseback. So he rented a big white stallion, leaped aboard, and went galloping over the countryside waving his hammer and shouting, 'I am Thor! I am Thor! I am Thor!'

"Whereupon the horse pulled to a stop, turned around to look at his rider and said, 'Of course you are Thor, thilly; you forgot the thaddle!' "

SERVICE For The Northeast Farmer BUREAU

by M. A. Parsons

NO TIME LIMIT

"Five months ago I signed an agreement with a company to install a cellarway and they were to notify us when they would be coming. However, we have heard nothing from them. We have written them but had no answer. We paid a deposit, with the balance to be paid on completion of the job. Since they have not lived up to their agreement, we want to cancel this contract and get our deposit back."

We contacted the company and were told they would make installation in a few weeks. They sent us a copy of the agreement which stated, "It is further understood that this agreement of sale and installation is not subject to cancellation." They advised us that there was no stipulation on the order that the work had to be done in any required time.

This emphasizes the importance of being very certain of the conditions of any contract you sign. You should know whether or not it can be cancelled and, if so, under what conditions. If you want a limit on the time in which a home improvement job can be done, that should be a part of the signed agreement.

SERVICE BUREAU CLAIMS RECENTLY SETTLED

NEW YORK	
Mr. Frank S. Marshall, Canastota (refund on gloves)	$ 20.96
Mrs. G. A. Malone, Ithaca (refund on bulbs)	2.00
Mr. David E. Brundage, Wallkill (refund on pants)	12.85
Mrs. Ruth Mattison, Salem (refund on order)	6.05
Mr. Edward Ruslink, Clymer (credit refund)	21.64
Mrs. L. H. Ackerson, Medina (refund on cards)	4.25
Mr. Howard Wick, Lee Center (refund of premium)	106.15
Mrs. Pearl Balcom, Freedom (refund on furniture)	20.00
Mr. Floyd Murdie, Adams (refund on order)	14.94
PENNSYLVANIA	
Mr. Clyde Kightlinger, Guys Mills (adjustment on tires)	4.00
NEW HAMPSHIRE	
Miss Norma Finley, Concord (refund on films)	4.63
VERMONT	
Mr. J. Sanford Small, Randolph (refund on recorder)	39.99
Mr. Ross Young, Johnson (refund on subscription)	4.00
CONNECTICUT	
Mr. Anthony Carbone, Torrington (damage claim)	20.00

NO WIGS

"The purpose of this letter is to obtain help in getting a wig or my money back. I sent a check for $12.99 for a 100% human hair, full-cap wig with free wig case and wig stand. I have not received my wig or even a reply from the company and I have written them twice since the original order.

"Could you possibly help me with this problem or direct this letter or myself to someone who could?"

We have had several complaints from subscribers who have answered magazine ads for wigs and have not received them. The National Better Business Bureau has had so many unsettled complaints against two of these companies that they are no longer referring any complaints to the firms. Consequently, since the companies apparently are not answering letters, we see no point in our contacting them either, so we are suggesting that any complainants write the Office of the Attorney General,. Bureau of Consumer Frauds, 80 Centre Street, New York, New York, and give them all of the facts.

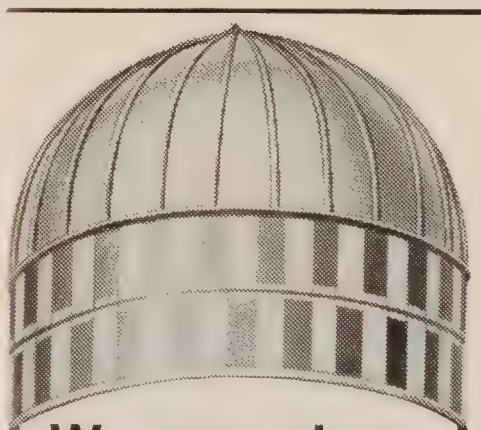
This same advice applies to those who received notices that they were winners of "free" wigs. Many "winners" have sent in the required amount, from $2.90 up, to cover the cost of styling, and then have either not received the wig or have not received a refund when an unsatisfactory wig was returned.

ADDRESSES WANTED

Descendants of Nathan Colman. Mr. Colman, formerly of Rensselaer County, moved to Lyons, N.Y. around 1840.

* * *

Elmer Ernest Beebe, born in Fair Haven, N.Y., Feb. 14, 1883. Married Rosetta Oldendorf of Avon. Had brother Walter, last known to be living in Watertown, N.Y.



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Winona — P. O. Box 5, Winona, Minn. 55987
Markle — P. O. Box 347, Markle, Ind. 46770
Utica — Judd Road, Oriskany, New York 13424
Ephrata — 1070 Steinmetz Rd., Ephrata, Penn. 17522
Charlotte — P. O. Box 21126, Charlotte, N. C. 28206

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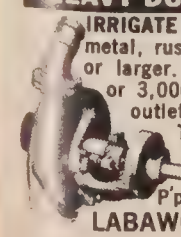

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Haying Time Accident Costly To Farmer

Local agent Len DeFrancisco of Falconer, N.Y. delivers claim payment in the amount of $1520.00 to Merle Cady of No. Clymer, N.Y.

Mr. Cady's accident happened while setting up a hay elevator. He was inside the barn up on the rafters when a board broke causing him to fall about ten feet. His right hand and wrist fractured upon hitting the hard floor. The serious nature of the fracture required hospitalizing for four days. Then two weeks later additional treatment put him in the hospital eight more days. It was many weeks before he could start working again.

Carrying several North American policies, Mr. Cady received medical expense and weekly income benefits totalling $1520.00. Mr. & Mrs. Cady and their two children have had North American protection for years and have drawn benefits from time to time. They know the value of adding new policies to keep up with the times and the value of keeping all their policies renewed.

OTHER CLAIMS PAID

Robert Jensen, Altamont, N.Y. ..... $ 109.31
Fell—bruised shoulder, hip, ribs
Victor J. Austin, Belmont, N.Y. 248.43
Kicked by cow—fx. nose, cut forehead
Grace Brotzman, Binghamton, N.Y. 199.28
Auto acc.—frac. thumb & shoulder cuts, bruises
Thomas E. McElroy, Freedom, N.Y. 357.84
Auto acc.—inj. ankle, knee, chest
Martin A. White, Moravia, N.Y. 328.56
Fell from hay mow—inj. shoulder
Marry G. Stormer, Jamestown, N.Y. 785.27
Bumped by horse—inj. knee
Jack Shappee, Pine City, N.Y. 207.15
Caught in meat grinder—fx. & cut fingers
Daniel R. Swayze, Otselic, N.Y. 231.42
Crushed finger in hoist chain
Cecil A. Barrows, Oxford, N.Y. 1305.00
Roller overturned, pinning against wall—loss of leg
Steven Rovers, Chazy, N.Y. 348.38
Burned on steam
Chester D. Gigliuto, Homer, N.Y. 153.10
Auto acc.—fx. teeth, cut chin
Kenneth A. Chichester, Sr., Stamford, N.Y. 1550.00
Skinning coon, knife slipped—severe inj. arm
Michael Blesy, Boston, N.Y. 1470.00
Acc. when moving railroad tie—back injury
Norman Degon, Malone, N.Y. 1370.71
Severe inj. to hand & fingers while shoveling
Paul A. Duffek, Johnstown, N.Y. 145.70
Dropped steel on foot—frac. toe
Robert C. White, Batavia, N.Y. 1400.12
Attacked by bull—injured knee
Sandra Shlotzhauer, Mohawk, N.Y. 1063.21
Pedestrian accident—internal inj.
Harold Porter, Watertown, N.Y. 1470.00
Tripped over wire—severe knee injury
Joseph White, Jr., Port Leyden, N.Y. 479.33
Pickup truck acc.—cut head, concussion
Mable Mashaw, Lyons Falls, N.Y. 1354.28
Slipped & fell—fract. ankle
Joseph Salamacha, Leonardsville, N.Y. 167.50
Kicked by cow—injured head
William H. Seeley, St. Johnsville, N.Y. 320.00
Fell getting off tractor—injured back
Clifford A. Lucas, Ransomville, N.Y. 223.93
Truck acc.—cut finger, lip, bruised ribs, fx. teeth
John M. Freeman, Boonville, N.Y. 1367.12
Knocked down and run over by horse—frac. leg and rib
Lorene Comstock, Tully, N.Y. 760.00
Auto acc.—fx. jaw, ribs, kneecaps, teeth
Louis Young, Victor, N.Y. 128.00
Jack slipped pinning hand—frac. finger
Frank Bauer, Unionville, N.Y. 110.50
Auto acc.—bruises
George S. Loomis, Pulaski, N.Y. 309.15
Caught in PTO—inj. leg
Lida Holbrook, Otego, N.Y. 241.28
Tripped and fell—frac. foot
Sherman Herrington, Hoosick Falls, N.Y. $ 191.40
Mauled by bull—concussion, bruises
Lawrence J. Savage, Helene, N.Y. 274.29
Fell—frac. ribs
William S. Mason, Gouverneur, N.Y. 742.46
Dump truck box came down on insured
Harold B. Knight, Waterloo, N.Y. 281.50
Tractor acc.—frac. rib
Minnie Hughes, Bath, N.Y. 525.70
Fell—frac. arm
Clifford Peck, Cohocton, N.Y. 453.20
Kicked by cow—inj. back and hips
Gertrude Cranmer, Waverly, N.Y. 1116.43
Fell—frac. hip
Francis E. Wilson, Berkshire, N.Y. 980.30
Auto accident—multiple injuries
William H. Clark, Trumansburg, N.Y. 1580.00
Auto acc.—fx. leg & toe, cut knee & face, bruised chest
Levinus Bliek, Williamson, N.Y. 534.70
Slipped off tailgate of truck—inj.
Hazel A. Vanderwall, Palmyra, N.Y. 198.38
Bitten by cat—inj. hand
David L. Post, Perry, N.Y. 420.00
Fell—inj. shoulder, arm, nose
Albert Gaige, Millerton, Pa. 274.56
Fell off horse and kicked—concussion
Donald L. Isaaca, Canton, Pa. 218.20
Auto acc.—injured scalp & hand
A. Luther Watt, Meadville, Pa. 1590.00
Hand caught in picker—severe inj. to hand & fingers
Richard Naylor, Springville, Pa. 882.84
Fell from roof—frac. arm, cut knee
Charlotte A. Lutz, Lake Ariel, Pa. 508.57
Slipped & fell—frac. ankle
Daniel Thompson, Pemberton, N.J. 113.50
Caught in gear—frac. finger
Lewis Snyder, Columbia, N.J. 351.43
Fell from scaffold—inj. head, arm, legs
Evelyn C. Fay, Greenfield, Mass. 1000.00
Fell—compound fx. of leg
Michael Hotsley, Williamstown, Mass. 239.50
Auto acc.—inj. chest
Edwin Swindell, Barre, Mass. 1000.00
Pinned under falling tree branch—frac. pelvis
Abbie Grandlemere, Amherst, Mass. 592.68
Auto acc.—multiple bruises
Clifton Grant, Brooks, Me. 140.00
Slipped on tree root—inj. back
Josephine T. Solasz, Winchester, N.H. 238.57
Fell—frac. arm, inj. shoulder
Hermon Griffin, Woodsville, N.H. 1330.00
Back injury
Mabel Wright, Grafton, Vt. 202.30
Slipped and fell—back injury
Roy A. Reed, Athens, Vt. 201.20
Hit by stone—inj. rt. eye
Floyd Wheeler, Pittsford, Vt. 187.00
Kicked and thrown by cow—inj. jaw and teeth
Wayne Stearns, Johnson, Vt. 195.91
Hit by falling tree—concussion, cut scalp
Beverly Camp, Randolph Center, Vt. 108.56
Auto acc.—whiplash

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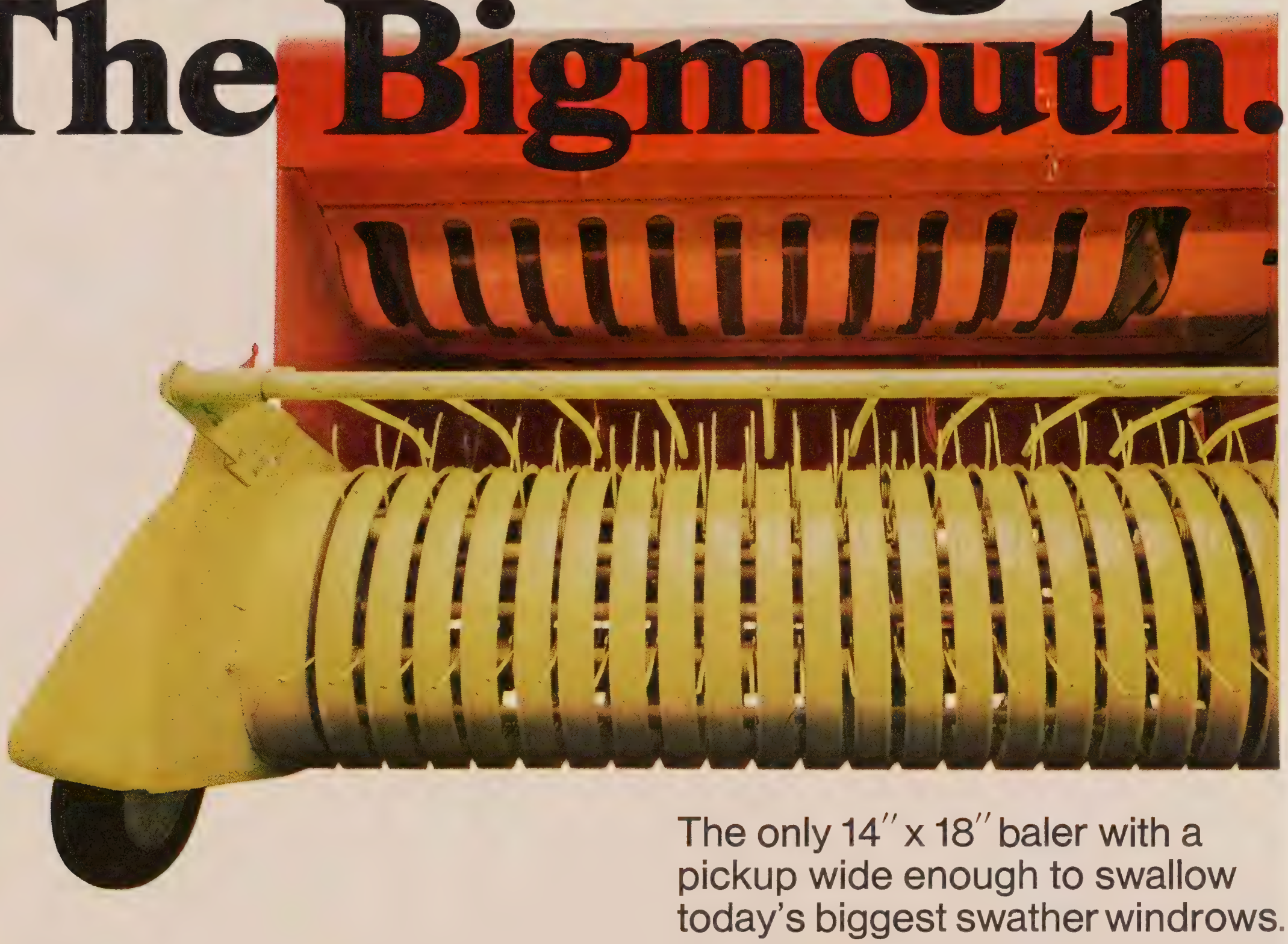

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For The Northeast Farmer

JULY 1969

American Agriculturist
and the
RURAL NEW YORKER

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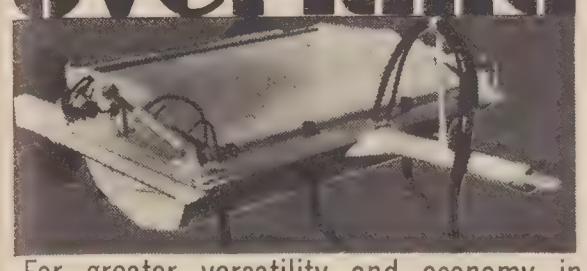

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For The Northeast Farmer

American Agriculturist and the RURAL NEW YORKER

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OUR COVER

The golden harvest begins pouring into the storehouses of the land in July. Russell Matthews of Honeoye Falls, New York, pilots the combine. Photo: Doris Barker

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EDITORIALS

by GORDON CONKLIN

HOT DOGIES!

Every cattlemen's association in the land has been busy as a cowpuncher at round-up lately . . . proving to consumers that beef is still a good buy. The "problem" . . . would that agriculture had more of it . . . is that beef prices have been unusually strong for months, and appear to be headed toward even better levels.

The government-control people are gnashing their teeth in rage because here is an example of an industry "rescued" by market forces without any significant government intervention. The industry's determined effort to sell its product . . . plus restraint in feeding cattle to heavier weights . . . have teamed up with rising consumer incomes to bring a bonanza payoff at the meat counters and livestock markets.

Marketing has become a key element in the beef business; livestock marketers have learned to stand in the boots of their wholesale and retail customers. The name of the game recently has been leaner cuts, less wasty carcasses, attractive packaging, skillful merchandising . . . and the meat industry has been working to improve them all.

There is absolutely no reason to apologize for rising food prices in a nation that still spends less than 20 percent of its income for food. And, there is no valid reason to buy the idea that a government program is the only way to bail out an industry plagued by unacceptable returns to producers . . . as was the case with the cattle industry not long ago.

FOREVER ROTTING

One of the favorite indoor and outdoor sports of some avid conservationists is to press for withdrawal of wilderness acres from eligibility for timber harvest. The U.S. Forest Service estimates 16 million acres of what it calls "productive forest lands" had been withdrawn from harvesting in the entire country by 1968. There are presently four more major land withdrawal proposals before Congress . . . 697,400 acres in Idaho, Montana, Texas, and California.

In New York State, more than two million acres of Forest Preserve . . . heavily sprinkled with lakes . . . are held inviolable by constitutional edict. This, even as plans multiply for inundating thousands of acres of productive farmland for recreational areas in the state. Not a stick of timber may legally be cut from those "forever wild" lands.

Some of the same folks who press vehemently for restricting the chain saw to fewer acres also are strong advocates of bigger and better housing projects. Alas! It is a fact of life that lumber is needed for housing . . . and those old-fashioned forces of supply and demand still influence prices. The cost of lumber soared recently in response to booming demand and shrinking supply. To prevent further rises, President Nixon has directed that 1.1 billion additional feet of timber be offered for sale from federal forest lands.

On every side, I see seemingly contradictory instructions to the technologists: produce cheaper electric power, but avoid the thermal pollution created by the more-efficient nuclear reactors . . . we want higher quality and more economical food, but without the use of necessary pesticides . . . handier jetports are favored by all, but they must be located at least 50 miles from any residence, and in an area that disturbs absolutely no wildlife . . . get cracking on those needed 26,000,000 housing units, but don't you dare touch a single tree on sacred ground!

There is nothing new about the illogical human desire to have the best of both worlds without the agony of making hard choices, or of coming to grips with the responsibilities that always accompany privileges. But let's be sure we've taken a cold, realistic look at the alternatives . . . and the consequences of each one . . . before embracing a narrow point of view with all the fanatic fervor of a college sophomore manning the barricades against The Establishment!

The one-man-one-vote Supreme Court decision is defended as reaffirming the national heritage that **people are more important than acres.** Suppose people-orientation is also a valid principle in connection with land policies concerning multiple versus single use?

NEEDED: MORE S.O.B.'S

It's been said that a man's character can be judged not only by the company he keeps, but also by the nature of his enemies.

We live in an age emphasizing "adjustment," "orientation to environment," and general noninvolvement with unpleasantness.

In many rural villages, I detect considerable resentment of the fact that zoning ordinances are not strictly enforced . . . nobody wants to be known by the term applied to that loner from the swarm known as the "Esso Bee." School districts are sometimes saddled with a mediocre or downright incompetent teacher because nobody on the administrative staff or school board wants to be anything but nice when it comes tenure time.

It seems to me that the world is always desperately short of those individuals who are willing to fight for the right as they see it . . . and at least able, if not exactly happy, to accept the inevitable price of unpopularity. People are primarily emotional . . . rather than rational . . . creatures, and seeking a totally-realistic course of action isn't likely to endear the seeker to everyone.

Simply joining "The Disagreeables" isn't enough, though, unless a person:

—Avoids the temptation to attack his opponent's personality, rather than sticking to the issue involved.

—Accepts gracefully the majority decision, whichever way it goes.

—Phrases his disagreement in such a way as to avoid blinding and deafening his opponent with rage so that the opposition no longer communicates.

—Subordinates his personal goals concerning the problems at hand to the needs of the community as a whole.

More such S.O.B.'s we need.

AUCTION

Who would inspect the worn spot of a rug
Hid by a chair . . . or turn an antique jug
To find its crack? But now put up for sale,
The sun lays bare in merciless detail
These flaws a woman's hands and love once hid.
The sweating auctioneer demands a bid;
The buyers' feet press down a flower bed
And move among the relics that are spread
Upon the lawn, their dignity and value shrunk
To what the buyers look upon as junk.

Mary C. Ferris

HUNGRY . . . BUT PURE

Once upon a time, on the far-off planet of Organo, there lived a large number of people who made up a tribe called Erutan . . . all of whom spelled their names backward. Now the Erutans had a population problem . . . their people would rather love than fight, and their food supply was always inadequate. Some starved, and there were many more who were always hungry.

Now it came to pass that a farmer named Rotavonni began to experiment with spreading various ground-up rock on his fields. Finally, he found a mountain whose product . . . which he called "Fossilizer" . . . caused his crops to grow wondrously, and he began to spread the word to his neighbors.

The news of this development reached the ears of the king, and he convened his chief priests and wise men to advise on this new thing. After lengthy consultation, and much reading of the stars, the learned ones declared that the king should forbid such a practice . . . that it would pollute the streams, ruin the environment, and endanger the citizenry with fitrites from fitrogen.

Rotavonni's head was separated from his shoulders forthwith, and the mountain declared the seat of the Evil One, to be avoided by all Erutans forever.

The years went by, and it came to pass that another man sought diligently some way to control the hordes of bugs that constantly chewed food crops to the very ground. He, too, finally found a promising rock . . . one that, when powdered and dusted over crops, would cut down the destroyers by the millions.

Eventually, news of this wonder also reached the king. He convened his advisors once more, and waited for their verdict.

"This is the abomination of abominations," they reported, "and must be stopped. For generations our children have picked kritters off plants and killed them by putting them in gourds filled with catnip juice!"

And so, another head rolled at the dreaded block . . . and from that day forward no man tried to find new ways to grow more food on a plot of ground.

To this very day, the land of Organo remains unpolluted . . . except by the bodies of the starved. The spring is silent . . . except for the wails of hungry children. No Erutan is endangered by any nasty old chemical . . . although they do succumb by the thousands to the Green Death, the Erutan Chills, and the Galloping Tiefus . . . all spread by kritters of various kinds.

A great monument has been erected to the wise men, bearing this inscription:

"Blessed are they who have protected our people from abundance, their hearts from impurity, and their stomachs from enlargement! Our cup runneth empty."

I am writing concerning your editorial about the "Straw Man" and the National Farmers Union. There are some giants moving in here and in Idaho, but also many more acreages are being taken up by outside money for tax or other reasons.

I highly value a family farm . . . with a good income comparable to that of the owner of a business in town. I think the family farm can always be competitive on equal footing. If outside interests have some tax advantage to get into farming, this could work undue hardship on the family farmer.

I define a family farm as one that is actively operated by the family farmer, and one where his family supplies a substantial share of the labor force. When you have a hired manager, foreman, and outside-of-family work force, it ceases to be a family farm. It might not necessarily be a "corporate giant," but perhaps a doctor or lawyer who doesn't necessarily have to show a profit on the farm operation . . . and, naturally, this can create unfair competition at the market place.

Leased

You comment on a USDA report which indicates that outside interests are not coming in fast at present. I notice, however, that this is based on corporations owning farms. I've enclosed a clipping to show what happens in many cases here . . . land is leased, so wouldn't show in those figures, but is definitely not a family farm. There are also many acres of private land here.

The USDA census has a listing of "large-scale farms" in the commercial grouping. In 1959, this group produced 25 percent of the Irish potatoes in the United States. In 1964, this jumped to 54 percent of the total U.S. crop. I'm sure many family farms entered this class, but I wonder if possibly many outside interests didn't also that aren't shown in a survey of just corporate-owned farms.

Editor's note: The author of this letter lists 18 companies operating farms in Idaho, Washington, and Oregon . . . including Shell Oil Co. (8,000 acres), Broadview Mint Co. (15,000 acres), J.R. Simplot Co. (11,500 acres), and A.J. Heinz Co. (11,000 acres). Average land holdings amount to 5,500 acres, ranging from 1,000 to 15,000 . . . and this involves cropland, not range country.

Being largely a potato grower (my brother and I have 250 acres this year), I am best acquainted with them. Most of the farms I mentioned are heavy in spuds, perhaps half of the acreage each year. I think you can see all these operations could represent a sizable production, easily larger than total potato production of upstate New York.

There are many more examples that could be listed. It appears to me that we have a definite trend that is not being shown by present census methods. Development of sprinkler-irrigated land in the West takes large amounts of capital . . . from $200 to $500 per acre. This is subject to depreciation and investment credit, which could be of great income-tax value to a person or company making a lot of money somewhere else. —*Quentin J. Mehlenbacher, Pasco, Washington.*

CORPORATE FARMING

Most states, including those of the Northeast, allow farmers to incorporate their businesses . . . and allow existing corporations to engage in farming activities. Not so in North Dakota, however.

In that state, a law was passed in 1932 which specifically prohibited any corporation from farming or owning farm land in North Dakota. By 1967, pressure had grown to modify that law; the Legislative Assembly repealed certain sections of the law. However, the Governor vetoed the bill . . . the Assembly passed it over the Governor's veto . . . but referral petitions garnered enough signatures to force the matter to a referendum in the general election of 1968.

The people voted two to one to reject the new legislation that would have allowed limited incorporation in farming operations. Therefore, the severely-restrictive law enacted in the 1930's remains in force.

Minnesota and Kansas also have placed certain limits on farm corporation . . . although not nearly as restrictive as North Dakota. Restrictive legislation stems from the fear that corporations will dominate farming if allowed to operate unchecked. A recent study by the USDA, however, does not support such fear.

The information contained herein is general in nature and is drawn from sources deemed to be reliable. Any application to a particular farming operation requires the advice of qualified experts and is subject to limitations of good management, weather and other conditions present at the individual location.

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Part of the Irwin herd has grain available on a free-choice basis.

UNLOCKED THE GRAINBIN

BROTHERS Roy and Robert Irwin of Earlville, New York, have their 108 cows separated into two groups according to milk production. Those producing 50 pounds or more per day are in one group; those below 50 pounds are in another.

The 50-plus group has access to free-choice grain in the free-stall area **and** during milking in the parlor . . . ad libutum, the college research workers would call it. Roy estimates that each cow in the favored group packs away an average of 40 pounds of grain per day, ranging from 30 to 50 pounds. The under-50 group receives free-choice grain only during milking in the parlor . . . and averages 12 pounds of grain per cow per day.

Up Slowly

Two weeks before dry cows freshen, they begin to get "revved up" on grain . . . worked up in amount slowly until they're on full feed by freshening time. "You can't overfeed a fresh cow early in lactation," Roy comments. Previous to the dividing of the herd, **all** cows had access to all the grain they wanted (October '68 until late February '69).

Grain fed in the parlor comes from a commercial source, is a mix of corn meal (without cob), urea, and soybean oil meal . . . and carries 18 per cent protein. For the free-choice grain, the Irwins buy from neighbors in the fall, then purchase from farther-away farmers in the corn area of Central New York in winter.

Prices for local 30-percent-moisture ear corn were around $25 per ton in the fall . . . rose to $42 per ton on corn with 15 to 20 percent readings by late winter. Corn-and-cob meal is supplemented with urea (and some soybean oil meal) to make a 16-percent-protein ration . . . along with some beet pulp (200 lbs. per 3200-pound batch.)

Butterfat

The bugaboo of free-choice grain has sometimes proved to be butterfat depression, but the Irwins report it has held up to 3.5 to 3.6 percent. They believe the cob in the ration has helped prevent low-butterfat problems. Hay is the only roughage . . . also fed free-choice. There are two cold-air mow dryers here; hay quality is generally good. Thirty thousand bales were put up in '68.

There are 138 free stalls in the barn only recently completed here; sand is the major bedding used (some sawdust). Stalls are 7 feet long, having a neckboard two feet back from the front. The Irwins list manure disposal as their number one problem . . . increasing milk per man as their number one objective.

There are basically only the two brothers in the work force . . . supplemented by a high school boy helping milk two or three nights a week, and on weekends. The Irwins are shooting for 1,500,000 pounds of milk sold this year . . . and believe that 1 million pounds **per man** is within reach.

They're not addicted to long hours, though . . . as testified to by the four snowmobiles owned by the two families. They take time for some recreation amidst their push for greater production per man.

Roy (left) and Bob Irwin look over the herd production record book in the milkhouse. Herd average is 14,300 pounds of milk per cow.

MILK AND TREFOIL

Darwin (Winn) Clark III operates a 140-cow dairy farm near Whallonsburg in Essex County, New York. He hopes to sell nearly two million pounds of milk in calendar 1969, with the help of two full-time employees . . . plus the summertime help of his father, whose name is also Darwin.

There are 400 acres of cropland in this operation . . . growing, among other crops, 50 acres of Yorkstar seed wheat in 1969, as well as 50 acres of Viking birdsfoot trefoil seed acreage. Winn's father has been in the trefoil seed production business for 20 years, and is president of the New York Seed Improvement Cooperative. Trefoil prices were strong in 1969, returning $1.75 per pound to the grower for Viking seed.

Seed Yield

A good yield of trefoil seed is 200 pounds per acre, but the average over the years runs nearer 150 pounds. For seed production, trefoil is planted early in the spring without a companion crop, using a Brillion seeder that drops the seed between two cultipacker rollers.

The Clarks don't use an herbicide the seeding year on trefoil, but clip it a couple times to control weeds. Dowpon is used here as an herbicide on trefoil after the seeding year, taking out grasses and clover. The Clarks like to grow trefoil seed on land that's been in corn several years, and weeds pretty well taken out.

Harvested

After reaching the seed production stage the following year, it is windrowed . . . then threshed by a self-propelled combine fitted with pickup head. Timing of harvest (late July for Viking, and early August for Empire) . . . and weather at harvest time . . . are critical to success. In 1968, some growers in the area harvested a good crop of trefoil seed from fields that had been down 10-15 years, but it was an unusual year.

Alfalfa for hay has been seeded here with . . . and without . . . companion crops. "I hope we never grow any more oats," Winn says, "but you never can tell." No oats were grown in 1968, but Winn reports he hasn't absolutely banished the crop forever. The alfalfa weevil reached the area in damaging numbers for the first time in 1968, and the Clarks sprayed parathion on the stubble of almost all alfalfa acreage.

Silage

Cows are fed heavily on hay and corn silage. Silos include two uprights (20×50 and 16×40), plus a bunker that is 100 feet long, 30 feet wide, and 8 feet deep. Winn likes the horizontal, plans another 100×40×8 alongside the present one. The 20×50 is filled with hay-crop silage for summer feeding, then loaded with corn silage for winter.

The relatively-new dairy barn has 175 free stalls . . . measures 280×50 feet, plus a 35×55 wing holding the milking area. The parlor is a double-six herringbone in which two men do the milking. A 1000-gallon bulk tank holds milk for every-day pickup by a truck that takes it to the Mass.-R.I.-N.H. federal milk order area.

The barn classifies as a "warm barn," with insulation and mechanical ventilation. No supplemental heat is needed for its water supply. Manure is scraped from each end toward a centrally-located cross-conveyor that totes it to the spreader.

This farm has one of the most spectacular views in the Northeast. To the east are the sparkling blue waters of Lake Champlain . . . to the west soar the granite monoliths of the Adirondack Mountains . . . and all around the farmstead are the fertile acres flowing with milk and trefoil. It's a place where an "outlander" can rest his battered soul and find renewed faith that the earth is good.

—G.L.C.

Lynn Luder grading and packing eggs.

BUILT HIS HENHOUSE

Before he became a poultryman, Lynn Luder of Forestville, New York, was a builder. It was only natural that he should design and build his henhouse for 13,000 Leghorns in cages.

The house is unusual in that it has no forced ventilation. The front is practically all glass, with alternate windows open at the top and at the bottom.

When the house was built, Mr. Luder thought of raising broilers, but soon gave his attention to egg producers. Pullets are bought at 20 weeks of age, some arriving every month. A few old hens are sold locally after a year's production, but most are trucked out at one time, a load weighing 3 tons.

I brought up the question of force molting, a practice followed by one poultryman I know.

"At best," said Mr. Luder, "you only save the price of a pullet. On the other hand, you feed them for a month or two, some never come back, and egg quality is likely to be poor. It just doesn't pay in my situation."

The eggs are washed, candled,

(Continued on next page)

graded, and packed in dozen cartons. "It takes about 4 hours a day to grade and pack," said Mr. Luder. "Then they are put in the cooler, which will hold up to 300 cases. The cooler is cleaned out every weekend. We sell a few to retail customers, and deliver once a week to a buyer in Dunkirk. The balance goes to buyers who come to the farm for them."

The poultry manure is hauled away by a neighboring farmer. If necessary, the house can go four months without cleaning, but usually is cleaned more frequently.

In addition to the poultry enterprise, Hilltop Farm has three acres of grapes. — *H. L. Cosline*

HELPS PALATABILITY

When I walked into the dairy barn of Joe Ziegler of Arcade, New York, he was busy sprinkling molasses on hay in front of the cows in stanchions. I was interested to note that the cows showed little interest in eating, but after the addition of molasses many . . . but not all . . . began chewing.

"Bad weather interfered with haying last summer," Joe remarked, "and the molasses is used to help palatability and increase consumption. I fed molasses several years ago at the rate of 200 lbs. for 70 cows. Then I stopped for three or four years because the hay was good. Now I am using around 110 lbs. for 93 milkers. The last DHIC rolling herd average was 17,075 lbs. of milk, 607 of fat.

"The herd always has feed in front of them. We have 3 silos . . 20′×70′, 16′×35′, and 16′×50′. Since 1963 we have fed corn silage in an outside bunk feeder in summer."

I asked about his feeding schedule and crop production.

"I figure I'm a medium feeder of grain, with 25 lbs. a day tops for heavy producers.

"Crops are corn (some on the same ground for 10 years), oats, some wheat, and alfalfa. We use a lot of fertilizer . . . around half a ton per acre on corn and 200 to 300 lbs. of 0-15-30 or 0-25-25 on alfalfa after the first cutting. I hire it spread. We also spread around 150 tons of lime a year.

"I have one man to help, Donald Bartz, who has been with me for 6 years.

"As I see it, the outlook for the dairy farmer is good!" — *H.L.C.*

SEEDING

The Coon Brothers (Dirck and Garrison) of Amenia, New York, have been seeding hay crops for years without a companion crop. They've been making clear seedings. . . pure stands of red clover, or Viking trefoil, or alfalfa (presently Iroquois). As with many dairymen, the Coons have taken their lumps from the alfalfa weevil . . . therefore, the red clover in the picture.

The 1968 season wasn't so bad, but 1967 brought heavy damage from the evil weevil. The Coons have used a mixture of malathion and methoxychlor on alfalfa stubble after the first cutting . . . they used Guthion with similar timing in '68.

It's been eight years since there were oats grown on this farm. The Coon brothers "got sick of seeing oats go down and then have volunteer oats kill the seeding." The first year of seeding without a companion crop was a revelation to Dirck and Garrison . . . and the beginning of getting 1 to 2 cuts from a field in its seeding year. One year when the weevil was particularly bad, a new seeding had to be sprayed with insecticide . . . but normally this is not the case.

The herbicide program on new seedings calls for EPTC (Eptam), applied after plowing, and then disced in **immediately.** After the seeding is up to a height of .5 to 1 inch, the Coons spray with Premerge. Foxtail is the worst weed problem here as far as seeding competition is concerned.

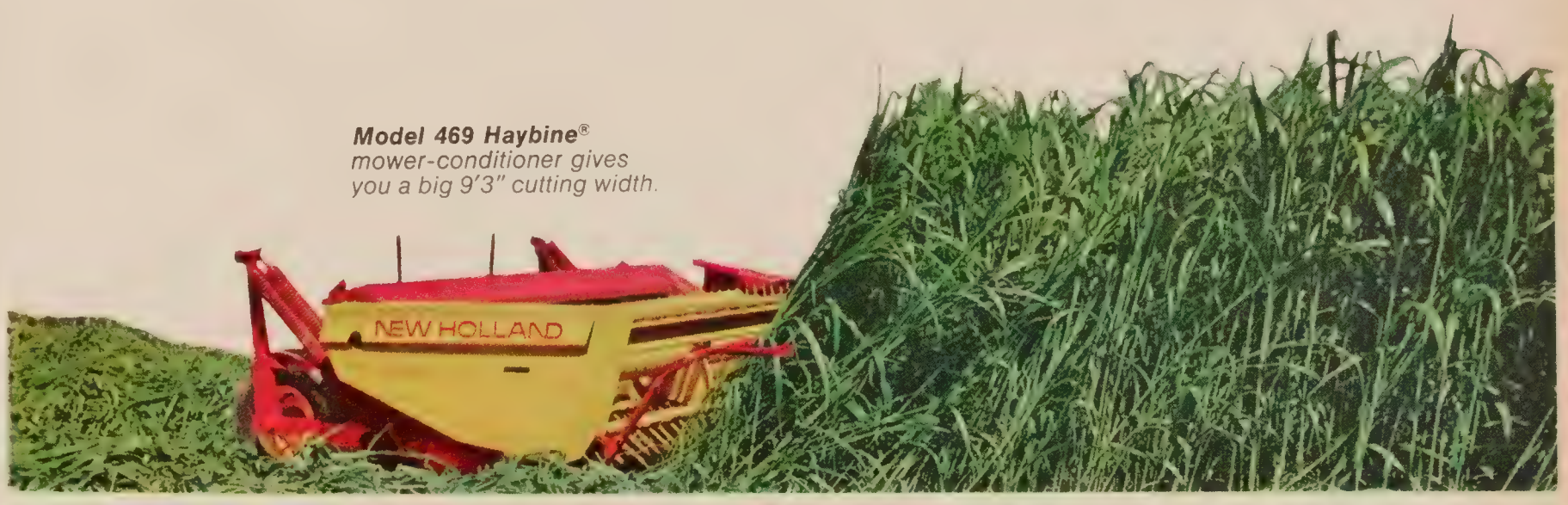
Seedings are usually made on land that has been in corn for 3 to 4 years . . . and atrazine residue can be a problem where spray strips have overlapped.

A drill equipped with band seeder is used to sow hay-crop seedings, and a cultipacking follows drilling.

Some haylage is made to feed cows during the summer, the rest of the hay-crop forages are made into hay with the help of two cold-air mow dryers. There are 120 cows to stow away the roughage . . . much of which is corn silage.

In 1968 there were 150 acres of corn grown . . . all but 15 acres on the contour strips that conserve soil on the rolling acres of the farm. A 30×60 sealed storage holds silage; a smaller tile silo is partially filled with high-moisture ear corn concentrate (also home-grown).

Silage is fed in an outside feed bunk, where three different groups of cows (milkers, dry cows and strippers, and heifers) get alternate cracks at the lunch counter. —GLC



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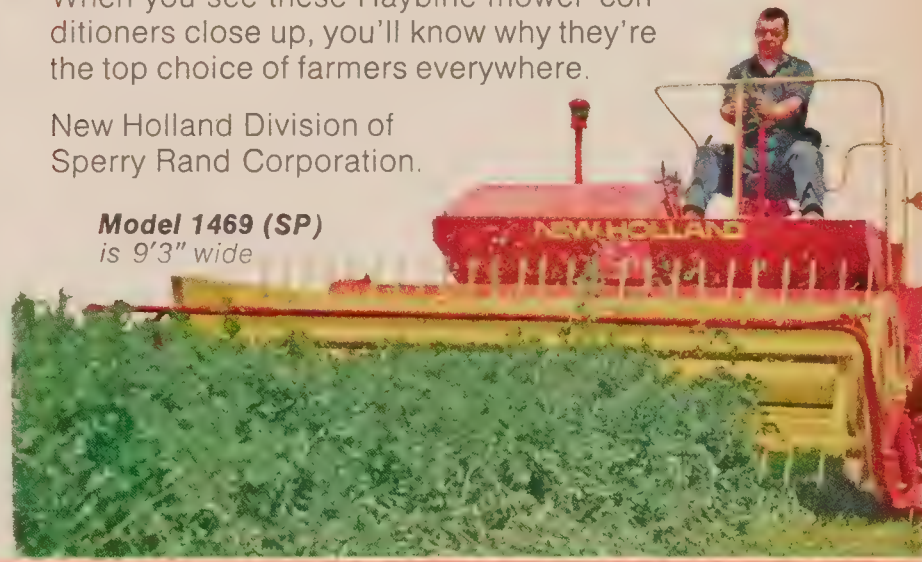

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FEWER WORKERS

by Amos Kirby
New Jersey Editor

The word from Puerto Rico is, "We can no longer be depended on to supply the needs on the mainland for workers." This is based on the views of Arthur West, president of the New Jersey Farm Bureau, and also those of the writer, who has been in Puerto Rico looking at the farm-worker situation.

There are several reasons for this:

1. Puerto Rico is experiencing a huge economic expansion program. More than 100 American industries have established plants in almost every important city and town on the Island.
2. An immense building program is going on there, including the erection of many high-rise apartments and hotels to accommodate the ever-increasing flow of visitors.
3. These two developments are providing employment for women in the factories, and men on construction.
4. Puerto Rico has a new political party in power. An agricultural group, it is discouraging workers from coming to the mainland. The president of the Puerto Rican Farm Bureau states that 25,000 foreign workers **need to be brought into Puerto Rico** by next season to harvest sugarcane.

All these things contribute to a growing shortage of farm workers in the Northeast.

Crop Losses

The Delaware and New Jersey asparagus growers were the first group to feel the pinch. One grower in Delaware did not harvest 1,100 acres of asparagus due to a labor shortage. It is estimated that New Jersey lost close to 3,000 acres because it was impossible to get workers to come to the mainland, even with the highest wage rate ever paid.

The tight farm labor situation is not confined exclusively to the Northeast. Florida growers this year took advantage of the "Reverse Rate," paid the higher wages under the 1965 ruling of the U.S. Department of Labor, and brought in upwards of 2,000 workers from the British West Indies. California lost a part of its strawberry crop due to a shortage of workers. This adds up to a realization on the part of growers from coast to coast that if there is to be a continual shortage of harvest hands, there also needs to be a revaluation of crops to be grown.

The Pinch

The present Puerto Rican administration was elected through the efforts of the farmers, and largely by the sugarcane producers. These growers, especially of cane, also have **their** problems in getting workers . . . in spite of a 12-percent unemployment rate on the Island. Puerto Rico has raised its wage rate to 80-85 cents per hour, plus a bonus.

In an effort to secure more workers, the government . . . apparently on orders from the new governor . . . has placed strict regulations upon the solicitation of farm workers for transport to the mainland. Arthur West was told that after the cane harvest was completed, they would do some recruiting. Just how effective this may be remains to be seen.

When Mr. West interviewed the Puerto Rican Secretary of Labor, he was accompanied by representatives of the Connecticut Shade Leaf Tobacco Growers . . . as well as those of Green Giant, one of the big processors with plants in Delaware and other states.

The Garden State Service, representing growers in Delaware, New Jersey, Pennsylvania and New York, has used every method in the barrel to secure workers, but with very limited success.

New Jersey is looking into the possibility of meeting the demand for tomato and peach harvests by securing workers from the British West Indies, which has a substantial supply. However, getting them admitted under the 1965 ruling of the U.S. Department of Labor involves paying many fringe benefits, plus a much higher wage rate. This might involve a base rate of at least $1.62 an hour . . . plus all fringe benefits now being offered workers from Puerto Rico.

In the meantime, the flow of southern migrants has declined. The number coming north in 1968 was discouraged (and will be in 1969) by strict federal and state regulations on buses, insur-

ance and other safety factors . . . as well as by tightening housing regulations.

What Next

What does it mean to both fruit and vegetable growers in the future? The first reaction, "Why grow asparagus, strawberries, tomatoes, apples, peaches and other high-labor crops?"

Some will say, "This is only a temporary situation and workers will be available when the present tight labor market is overcome."

But Mr. West told a group of 100 growers in New Jersey late in May, following his mission to Puerto Rico, "People no longer want to work on farms." In most urban areas of the Northeast, including such cities as Philadelphia and New York, there are large numbers of former workers on southern farms who decline to accept jobs on farms.

In mid-May, the writer visited northeastern North Carolina, where thousands of acres of fine cotton and tobacco land were planted to corn. Why has Delaware, formerly a state with large cantaloupe, sweet potato and other vegetable acreages, swung to soybeans and corn? Delaware, one of the smallest states in the U.S., grows over 150,000 acres of soybeans . . . and an increasing acreage of corn. The answer, of course, is that the growing and harvesting of the latter crops can be almost entirely mechanized.

What about harvesting machines? Increasing tonnages of processing apples and grapes are being machine-harvested, but fresh-market harvesters for these crops are still in the future. Snap bean and Irish potato harvesters have been around for years . . . asparagus and strawberry machines are in the experimental stage. In short, mechanical harvesting offers long-run solutions to labor problems, but there are some short-run deficiencies . . . particularly for some crops.

SEED POTATOES

New Jersey potato growers have solved the problem of cutting potatoes for planting.

Instead of one man cutting 12-15 sacks per day, a machine that cuts 60 sacks an hour has cut costs to a minimum, with two men operating the machine and placing a fungicide on the cut portions.

This machine makes few mistakes. It is estimated that only one piece in 100 may not have an eye.

WEED CONTROL

After eight years of testing, the New Jersey Agricultural College has a recommended system for weed control. One of the various chemicals available to do the job costs as little as a penny per tree. The most expensive amounts to 2.5 cents per tree.

The experiments secured controls for crabgrass, foxtail, pigweed, poison ivy, curly dock, plantain, and several others.

JERSEY TOMATOES

A substantial portion of the tomato crop grown in plastic greenhouses this year is being marketed through the Certified Markets. This year has again proven that fresh, vine-ripened tomatoes can be on the market in April. Demand has been greater than the supply.

ALFALFA WEEVIL

New Jersey alfalfa growers have harvested the finest hay crop in years. Regardless of the weather, the alfalfa weevil has been about as hard to find as the proverbial needle in the haystack.

The first insects parasitic on alfalfa weevil were released in Garden State alfalfa fields ten years ago. Since then several million have been distributed by the State Department of Agriculture. Only the experts have recognized the parasites, but because of them the weevil has about disappeared.

PAYS OFF

New Jersey growers who use southern plants report that the quality delivered from Georgia and elsewhere this year has been the finest ever offered. Inspection at the growing area, and a check on delivery quality, resulted in only top-notch plants arriving in the Garden State.

Of 100 million tomato plants imported, very few failed to meet the quality standard. The same standard was imposed on greens and peppers which are imported each year.

SUGAR BEETS

The New Jersey College of Agriculture is conducting research on sugar beets in the South Jersey area . . . tests on soils, fertilization, and other production problems.

The New York State Conservation Department maintains more than 1000 miles of foot trails within the Adirondack and Catskill Forest Preserves.

Big Capacity

No.1 reason why Superpickers are No.1

Fact is, more farmers buy New Idea Superpickers than all other makes of pickers put together.
We wouldn't expect you to buy a Superpicker next time just because most other farmers do. But we think the *reasons* why they bought Superpickers should interest you. And of all the reasons, one stands out.
Capacity. A Superpicker, from one end to the other, is built to tackle any field, any yield — any condition of corn whether it's ten feet tall or storm-blown down and tangled.
And if you've ever owned one, you know how Superpickers like to be left alone. How they are about as trouble-free as a piece of machinery can be.
Superpicker. Gets the job done.
See your Avco New Idea dealer now. Chances are your old picker will make the down payment.

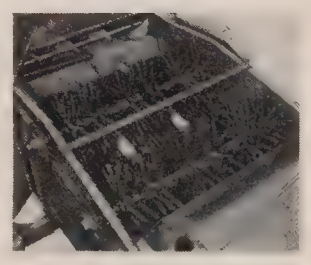
ig capacity gathering unit

uperpicker has long, tapered pating points, hinged above e gathering chains to follow ound contour, and lift all corn ently — even down and tan-ed stalks. Three sets of low-aching gathering chains are located ahead of the snapping lls to feed stalks evenly and gather up low hanging ears.

ig capacity snapping rolls

Set at a unique angle of 15° at the bottom and 45° at the top, Superpicker snapping rolls assure movement of the ears to the first elevator in a flash. Patented snap bars on the rolls aggressively process stalks and trash. And the exclusive tip design prevents grinding or shelling of ears.

Big capacity husking bed



The capacity of any picker is no greater than its husking bed. And Superpicker's is second to none. Rubber Flexi-Finger presser wheels with hundreds of life-like rubber fingers line up the ears, keep them moving along the bed. Rubber upper and cast iron lower rolls assure cleanest possible husking.

Husk, shell or grind as you pick

Next to capacity, Superpicker's main attraction is versatility. Mounted or pull-type 2-row Superpickers can pick and husk, pick and shell or pick and grind — right there in the field. And you have a choice of wide or narrow row with the 2-row pull.

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Feeder trough chain is No. 67 pintle (12,500 lb. strength) and drive chain is C-550 steel (average top strength of 10,000 lbs.). Interlocking, snap-together galvanized metal components reduce erection time as much as 50%. Suspended or floor-mounted, rails are mounted with Van Dale's exclusive clip-on brackets to provide extra-rigid support. Unit adapts to any feeding need in-barn or out-of-doors.

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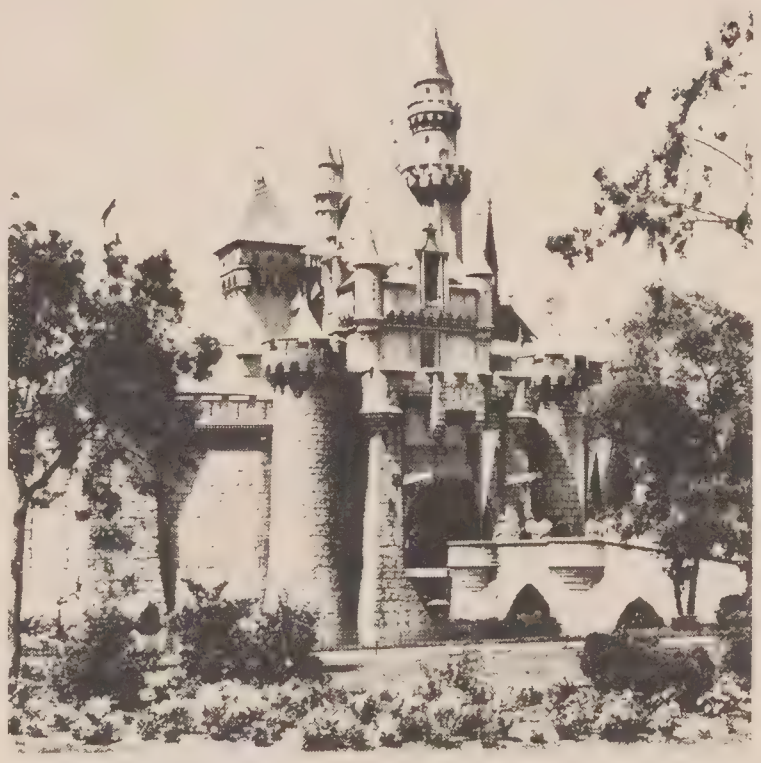

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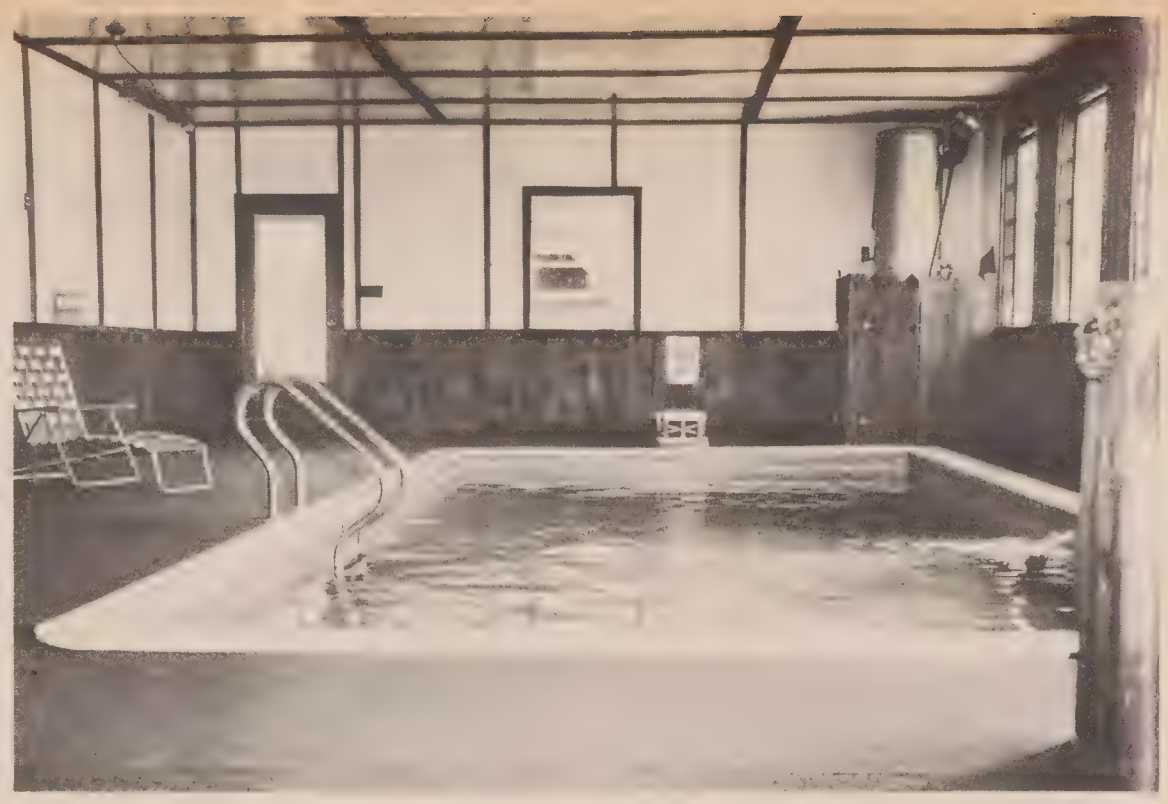

Come on in, the water's fine . . . even on a January day! Heater is at right corner of pool.

Mr. and Mrs. Archie Meek find that a sheet of plastic over the pool surface when it's not in use is the key to preventing excess moisture in the recreation area.

INSIDE POOL

BACK in 1954, Archie Meek of Norwich, New York, gained fame as the owner of the first cow to make three successive records of more than 30,000 pounds of milk per lactation (one was 35,000 pounds of milk and 1300 of fat). Today, he's also known as one of the first farmers in the Northeast to have an indoor swimming pool.

Measuring 13×26 feet, it holds 10,000 gallons . . . located in a 24×48-feet wing erected off the main part of the house. It has a plastic liner covering steel sides, and the sand shaping the bottom. Water, after going through a filter, is heated by fuel oil in a 50-gallon hot water heater.

Special Rug

An indoor-outdoor rug is on surface of concrete floor around the edge of the pool . . . and the Meeks report an odor problem with it until it was able to dry out. What allowed it to dry out . . . a sheet of plastic over the top of the water!

A big pool of warm water (80 degrees F.) in a room can create a tremendous moisture problem, but not if it's covered with a thin plastic sheet right on top of the water when not in use. The sheet pulls off as easily as it is spread out over the water surface. There's a fireplace in the corner of the room . . . and there are two electric quartz infra-red heaters alongside the pool . . . the rest of the heat coming from the pool itself.

The inside surface of the recreation room is made up of one-half inch of expanded polystyrene sandwiched between thin vinyl plastic sheets. In addition, there is blanket insulation 6 inches thick in the ceilings (plus vapor barrier between blanket and plastic "sandwich"), as well as three inches of blanket insulation in the sidewalls (also plus special vapor barrier). In addition, exterior walls have plywood outside the studs, covered with aluminum siding.

Windows

Windows along the south side are abundant, and are opened from April to October to further prevent any moisture condensation or problems. Truss rafters 28 feet long carry roof load without any posts in the room.

The Meek family, including five sons and a daughter, find lots of use for their recreation room and its swimming pool.

And, not far away, dairyman John Chapman of South New Berlin has also been bitten by the indoor-pool bug . . . plans one in a 30×48-feet addition to his home.

by Robert Clingan

OUR KIND OF WORLD

Students of the history of the church and observers of the current scene are sometimes shocked by the contrast between how so-called Christians respond to this kind of a world, and how Christians once reacted to a similar situation.

Disorder, upheaval, revolutionary change and violence by both government and revolutionaries, undisciplined and uncontrolled expressions of feelings and confusions on the part of persons who once felt so secure in a world where nothing is secure any more, are phrases which describe the world of the first three centuries as well as the world of today. Similarities can be documented by the historian. They can be interpreted and re-interpreted according to a person's inner world of feeling, world view of history, or status in society.

All of these seem the same except for one thing . . . the response of Christians to this kind of a world. Far too often, they wring their hands and bewail the times, assuming a posture much like Hamlet, who cried out,

"The time is out of joint:
O cursed spite,
That I was ever born to set it right!"

Another common response is summed up in anguished rhetoric, "What is this world coming to?"

In vivid contrast, the Christians of the first three centuries took a proper stance for this kind of a world. Instead of asking, "What is the world coming to?" they announced, "Look what has come to the world!"

They were men of faith, courage and conviction. They knew what they believed and where they stood, and they knew that this faith was what their world needed so badly. Their business was to bear witness to the faith that was in their inner being, and to live out that faith in the world. An objective interpreter of this period of human history wrote, "These Christians out-thought, out-loved, and out-lived the world!"

So, if we probe deeply the meaning of our faith and the nature of our witness, we will discover that today's world needs what the church at its best has always given. Historians tell us that only in this kind of a world has Christianity done its best work and reached its true greatness.

It is like the old folk tale in the Uncle Remus stories. Brer Fox had caught Mr. Rabbit with a tar baby and the pitch held him fast. He wanted to punish Mr. Rabbit for his "sass" and "impudence" and "defiance." To every proposal . . . from barbecuing him, to hanging him, to skinning him, to drowning him, Brer Rabbit said he was willing, ". . . but please, Brer Fox, don't fling me in dat briar patch."

Out of practical considerations and a desire to treat the rabbit the way it would hurt most, Brer Fox finally threw Brer Rabbit in the briar patch. A little later he saw Brer Rabbit on a hill, combing the tar out of his hair and saying, "Bred and bawn in a briar patch, Brer Fox, born and bred in a briar patch," and with that he skipped along as lively as a cricket on a live ember.

This could be the story of the church in times like this. Christianity was born, bred, and did its best work in a briar patch world. Truly, the age in which we live as Christians is our kind of a world!

RADIO RELIGION

by Wood Wilson

Now, whether folks are Methodists
Or Baptists it's the same,
Or whether they profess to faiths
Of any other name —
If they elect to stay at home,
To churches never go,
Whatever be the creed they own,
They've swapped for radio.

It's nice to loll in easy chairs
In comfort when it rains
And listen in to gospel songs
And distant organ strains,
And not be worried by the fact
The passing plate is due
To pause a second at your place
For sustenance from you.

This Radio Religion may
For shut-ins do a heap
And all the folks too sick to go
A little good may reap,
But whether they are Methodists
Or Baptists here or there
No church on earth can be replaced
By service on the air!

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It's as simple as that.

Agway

Doc Mettler Comments On:

RUPTURED STOMACH

A QUIET Sunday afternoon in July is a good time to daydream a little. A shady spot under a tree on the lawn, where you can hear the noise of other activity a little . . . but not **too** much . . . can lull a man into thinking of previous summer Sundays. Life is constantly changing, yet some things remain the same. Despite all our talk of the good old days, not too many of us would want to return to living as we did in years past.

In veterinary medicine alone, there are a dozen illnesses that were considered hopeless during my first years of practice (right after World War II), but which are now prevented or treated routinely. Of course, there are some new animal health problems that have recently appeared . . . and old ones that have become more prevalent. One that leaves me puzzled, and about which I'm unable to get much information as to its cause, is the increase in number of ruptured fourth stomachs in cows in the past few years.

Ordinarily when I write an article it is on a specific condition. I can tell you the cause, the symptoms, the prevention and treatment. But when I talk of ruptured stomachs, I cannot tell you the cause . . . only a little about the symptoms . . . and nothing about prevention or treatment.

About all I can do is to tell you that the condition **does** exist, and at least warn you, so that if you lose a good cow from this cause you will know that at the present time little that you or your veterinarian could have done would have prevented the condition or saved the cow once this thing occurred.

A few weeks ago, a call came in on a Saturday evening. A herdsman told me on the telephone that a cow that had been sick the previous fall with an undiagnosed condition and recovered, had become ill again. This cow had been milking for nine months and was not yet diagnosed safe in calf. She had been milking well, and was in good flesh. The past week she had developed a case of blind fouls and Saturday morning had a temperature of 105. Her milk production Saturday morning was normal, but she refused her grain.

Thinking the fever was from the foot condition, the herdsman had given her sulfa intravenously. By afternoon her temperature was normal, but she seemed sicker. Now, I do not approve of any owner or herdsman blindly giving intravenous sulfa because he guesses a condition to be thus and so. However, this man felt that since this cow was open so long he hated to spend too much on her.

Symptoms

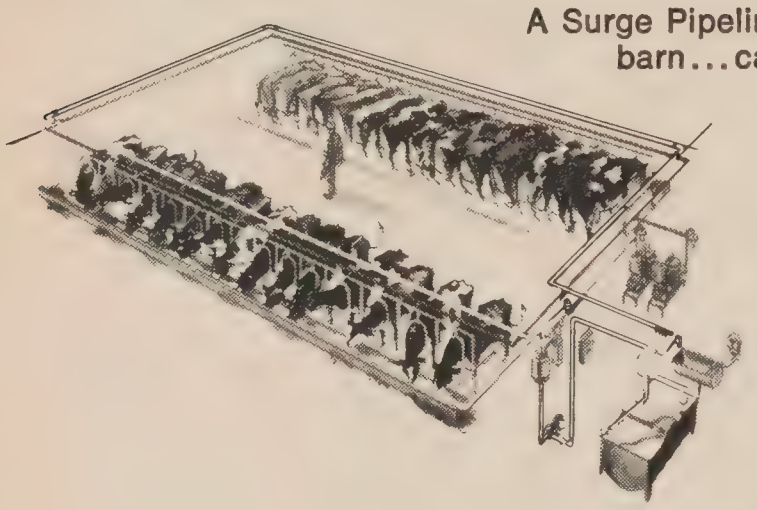
When I arrived at the farm, the cow was standing, her temperature was 102.6, but she felt "cold as a clam" to touch. Her rumen was dead, I could not hear her heart, but her lungs were normal. A rectal exam revealed that she had normal manure in her bowels, and that she was either in heat or soon would be in heat. A compass indicated a magnet in her reticulum in the normal place it should have been.

I diagnosed her condition as a ruptured abdominal abcess, thinking that she must have had an attack of hardware the previous fall, which could have caused the abcess. I gave her antibiotics and told the herdsman to let me know in the morning what she was doing. The difficulty in hearing a heart beat and the cold clammy feeling bothered me, but the cow appeared so strong I didn't expect her to be anything but better the next morning.

By noon the next day she was obviously dying. She was breathing rapidly and then holding her breath. Her temperature was 102.9, yet to the touch she felt like a dead cow. The night before I had though the cold feeling was due to the sulfa causing a sudden drop in temperature. She obviously had a severe general peritonitis, but the cause? Well, an autopsy would soon tell.

The cow died by three in the afternoon, and autopsy showed a ruptured abomasum (fourth stomach). The herdsman felt as though he had done something wrong. He said, "I should have

(Continued on next page)



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SURGE

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called sooner instead of treating her myself."

On the contrary, I feel he should have been congratulated on being aware enough to know she was sick Saturday morning. Most of the ruptured stomachs we see "die suddenly without being sick." In other words, they are sick for such a short period of time that no one even notices them.

I'm quite sure that if this herdsman had called as soon as the cow got sick nothing could have been done anyway. Theoretically, if one was to open up such a cow and repair the rupture he could save the cow.

This rip was a foot long and ingesta was all through her peritoneal cavity. A tiny ulcer perforating through the fourth stomach wall, if diagnosed early could be operated on and the cow perhaps saved, but a 12-inch rip . . . ?

Diagnosis

Of the cows I've seen with ruptured stomachs . . . or perforated ulcers . . . while they were still alive, there are a few diagnostic signs that are typical. The cow usually acts like an early milk fever, staggering or weak. In fact, she might even be down. Her temperature is usually slightly elevated, or on the high side of normal (102.8-104.2). The heart, if it can be heard, is rapid and very weak.

Her rumen is completely dead, but sometimes a sloshing sound can be heard in the abdomen if one rocks the cow back and forth or pushes in on her side. She may have a diarrhea, or no bowel movements, but will not have the hard impacted rectum of the milk fever cow. The most diagnostic symptom is the cold clammy feeling to touch.

One of my partners, when opening a cow to correct a displaced abomasum, found her to have a nearly perforated ulcer. He sutured it and the cow recovered. How long she could have gone before she ruptured is anyone's guess.

Causes

What causes ulcers? That question may some day be answered, but it will take a research veterinarian to find out, not a practitioner. It is known that stress and lymphomatosis are two things that cause stomach ulcers, and weakening of the stomach wall. Perhaps the same conditions that cause displaced stomachs cause them to weaken and break down.

My friend who picks up dead cows for animal food tells me that a high percentage of the "sudden death" cows he picks up have ruptured stomachs.

Since we don't know too much about the causes of ruptured stomachs, we can't say much about prevention. Perhaps we should return to our old methods of feeding (underfeeding?) cows.

However, by older methods we got ten to twelve thousand pounds of milk per cow. Today I have clients with cows having 18,000-pound averages. Should I tell them to change?

As far as treatment is concerned, once the rupture occurs it is too late to do anything. Before it happens no one knows it is about to happen.

I hope I haven't given you anything to worry about on these nice summer days. Chances are you won't ever have a cow with a ruptured stomach, but your neighbor might. When he tells you about it, tell him you read about it in The American Agriculturist and Rural New Yorker. It might at least make him feel better to know someone else has had the same trouble!

UNREGISTERED PUREBREDS

The Brown Swiss Cattle Breeders' Association Board of Directors, acting upon a favorable 2 to 1 vote of Association members, has adopted a new program to broaden the registration requirements of Swiss cattle. Called Identity Enrollment (I.E.), the program is considered an aggressive step forward in the dairy cattle industry.

Other dairy breed organizations have been watching I.E. develop and are considering similar programs. Such a plan provides a sound method for **bringing unregistered Brown Swiss females into the breed Herdbook.** The only requirement for a female to be identified is that she be officially inspected and possess characteristic Brown Swiss type and color.

I.E. has three steps to admittance in the breed Herdbook . . . identification, enrollment in the I.E. Herdbook, and certification of I.E. females of above-average performance. It is simple, yet protects against the registration of inferior animals.

Brown Swiss Identity Enrollment began May 1, 1969. Those interested in the program may contact the Brown Swiss Association, Box 1038, Beloit, Wisconsin 53511.

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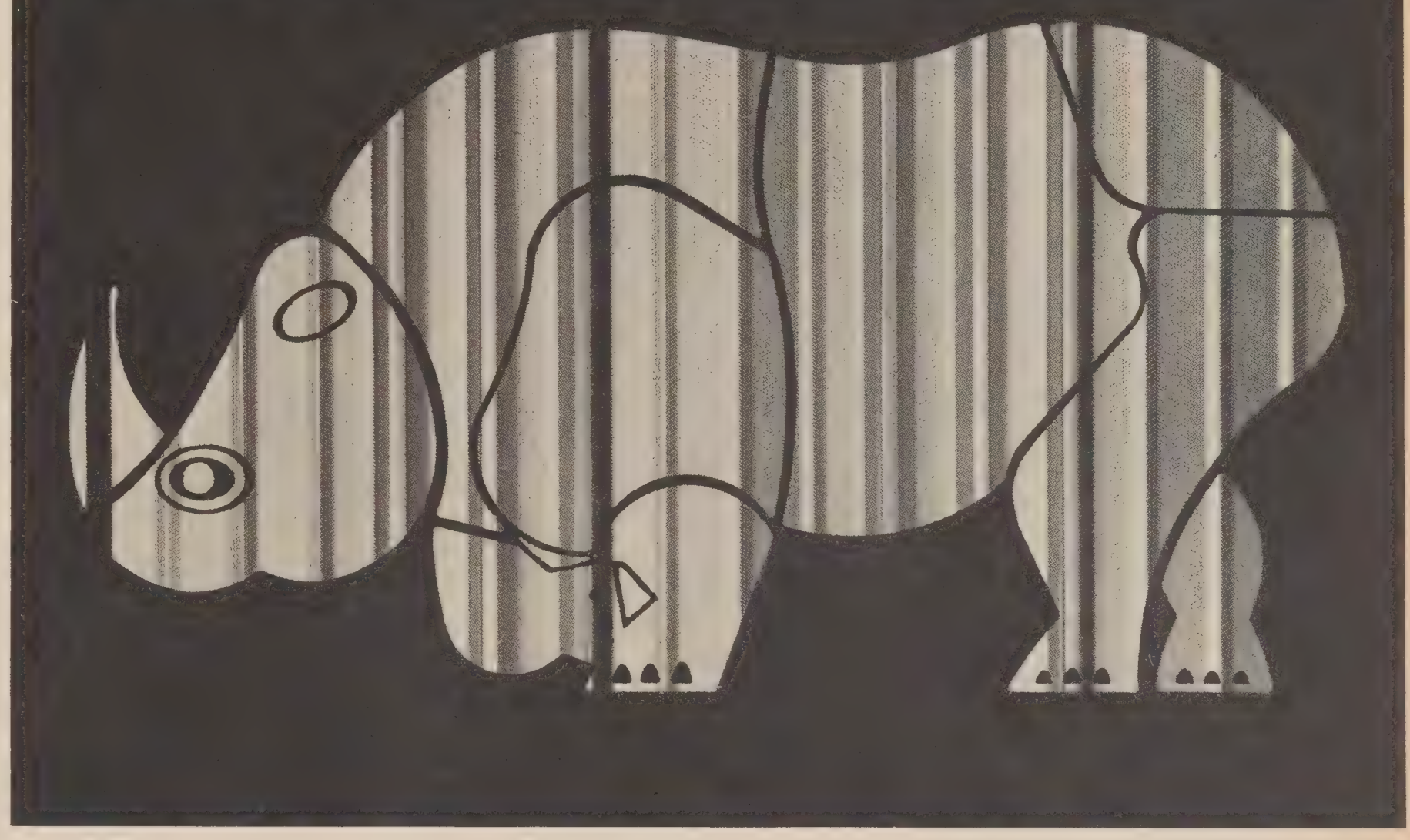

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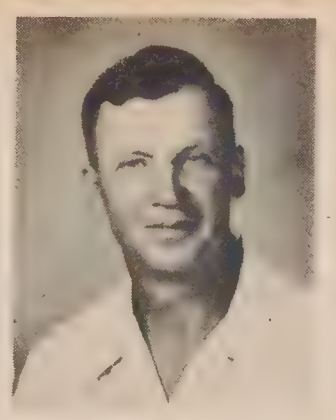

Gayway Farm Notes

by HAROLD HAWLEY

THE SKY'S THE LIMIT

It's a most interesting experience to talk to the same folks periodically just to see how much and how fast their thinking is changing. Just as change has been the order of the day for the better and more progressive farmers, so even more will the next few years witness dramatic moves on the part of those who will earn and wear the title of "good farmer."

Take the matter of dairy-herd size. In our area, herd size went to about 70 milkers in stanchion barns. With changeover to free stalls and parlors, units of a hundred head are becoming common. But listen to the plans . . . one hundred fifty or two hundred head are being talked about casually and planned for carefully!

Guidelines

Thank goodness there have been enough barns, parlors, and feeding systems built to furnish some guidelines for these expansions. One of the lessons many learned the hard way does not need to be a stumbling block to all. I refer to the location of the barn and dry lot.

Drainage from the buildings and away from the lot is of utmost importance. Concentrating a lot of cattle on a small acreage almost guarantees a year 'round mud problem unless the site is picked with some care. Even acres of concrete can't solve the problem if the area is one to which water naturally drains.

Another error which need not be repeated is in the matter of silos. Hopefully, with almost no limit on sizes available, more thought will be given to the investment in silage storage before any money is spent. The experience of many with larger herds suggests that a carefully planned horizontal silo . . . complete with roof and enough concrete . . . may offer some real economies.

Verticals

If vertical silos are selected, some thought should go into the size and number. If haylage, corn silage, and high moisture corn are to be fed, for instance, the storage necessary for each feed should be carefully computed for the expected herd size. The proper sizes of silos can then be erected.

We have learned here that it is not as efficient to have four silos (which give the correct **total** capacity) as to have three silos, each sized for a particular feed and use.

Planning the location of the silos sometimes seems to be neglected. Some get located where they louse up the most ideal and logical manure removal route. Some are put in just the right place . . . except that they are tough to fill when they're up in a corner between the end of the barn and the dry lot fence or the tool shed! Then again those located on a slope are a bit more difficult to fill than if the ground is level.

Possibly as serious as any of these is the extra distance some feed has to be moved from silo to bunk just because the silo is located wrong. Of course, when adding a silo to an existing barn and feeding system there are usually not too many choices as to where it can be built. But where a new barn is being planned, surely the location of the feed storage is one of the important decisions that should be made before any earth is broken for the barn foundation.

Another real area of concern should be manure handling. If manure is to be scraped, then rounded and curbed corners are a big timesaver. Alleys of uniform width should make it possible to get a blade built to move it all with one pass through the area.

If manure is to be stored, there are a couple of lessons for all of us to heed. First off, most everyone we have talked to agrees that tank holding devices hold fewer days' accumulation of manure than expected. A little less optimism is in order here!

If the tanks are to hold the tonnages expected of them, they will need to be engineered and built with those pressures in mind. No one needs be told that a collapsed manure tank wall is a most serious and costly problem.

The business of how to grain cows housed in a free stall barn should be decided before the barn is built. If the cows will be handled in bunches according to production, and grained (as well as "roughaged") in groups, then the grain storage facilities should be planned into the silo area. Likewise, the barn itself will need to be planned so that the cows **can be handled** in groups which can be kept separated at milking time and even on pasture or in the dry lot.

Parlor Feed

If the decision is to feed grain in the parlor (and although we do feed some in the parlor, I'm convinced it is not necessary), the grain storage space should be built into the area over the parlor. (Continued on next page)

Possibly the one most important decision as one plans his new barn has to do with the parlor. How long do you plan to spend milking each day? The number of milker units and the number of men involved should be fitted into the calculations as to the number of cows to be milked per hour.

As herd size increases, it will be increasingly important to plan the milking time. Is one man to milk for 8 hours a day, or are two men to milk 4 hours a day, or what?

Then comes the item of water supply. Doubling the herd size does more than put a strain on the water system; in many cases, it necessitates a whole **new** water supply or supplies. Certainly, it's suicide not to have at least two sources of water available for both drinking and washing up. These systems should all be interconnected so that the turn of a valve is all that is needed to put one back in business if a pump conks out, a line freezes, or whatever.

Even in the case of a pond water supply, used only for drinking by the cows, the systems should be inter-connected. (My apologies to the health people who say otherwise.)

Once in a blue moon, a gravity system from a pond will cease to flow . . . either from silt in the line, or from moss over the intake strainer. How can you be worse off than with ten feet of 32-degree water in your pond, four months of cold weather left, and some moss over the strainer? Just a turn of the valves and the pressure from the pump will blow out the gravity line from the pond . . . and you're back in business!

Two Sources

Likewise, we feel that two supplies of water for washing up are a must. Sooner or later, the regular supply will fail and an emergency will exist unless some provision for this has been planned into the new barn. Our regular house water supply has bailed us out several times for a few hours until a pump or motor could be fixed.

One of the worst mistakes we made when we built (but by no means the only one) was in not having a definite plan for expansion. Whether it is ever used or not, there should be some thinking **before** a barn is built as to what will be involved if someday the herd size is increased again.

As long as we all continue to do things, we will continue to make mistakes, but hopefully we will look for information to avoid some of the pitfalls already encountered by others. After all, at today's prices . . . and taking into account the size of units being built . . . any additional time, travel, study and talent that can be brought into the planning of the new barn will pay off handsomely in convenience, efficiency, and pleasure for a long time ahead.

WHO'S PUSHING WHOM?

Now and again we hear or read that "those big guys" are pushing out all the smaller farmers. It's rather interesting to examine this objectively. In most communities, we seem to have some large and some small farmers . . . with the latter far outnumbering the former.

Over a period of time, as a parcel of land or a farm unit (large or small) comes up for sale . . . be it because someone retires, dies, or sells out to take a job that looks more attractive . . . the property moves to the highest bidder. This may be a new operator buying a unit, a "small farmer" expanding, or a "big farmer" wanting to add some additional volume.

Around here, more times than not it will be a non-farm person wanting a home in the country who will then rent or sell the land he does not need or want. In any case, I don't see as anyone pushed anyone off the farm.

It's true that, over time, the more efficient farmers make money and can out-bid someone else for property that comes up for sale. As specialization and mechanization continue, additional size has appeared because it offers opportunities for economies. However, this is true for farmers of every size and, so far as I can observe, the competition for extra land comes from almost everyone who plans to stay on in the business.

Those who decry this trend, or criticize the guy who is expanding, might look at the alternatives. Sit still, change not, let all the rest of the world go its crazy way. For some who think the good old days were best, this may seem the best course.

In spite of many, many happy memories of a childhood when the pace was more leisurely and change was much less abrupt, I'm not the least bit interested in a return to yesteryear . . . even if that was in any way possible. Change will go on, which seems to mean larger and more specialized units.

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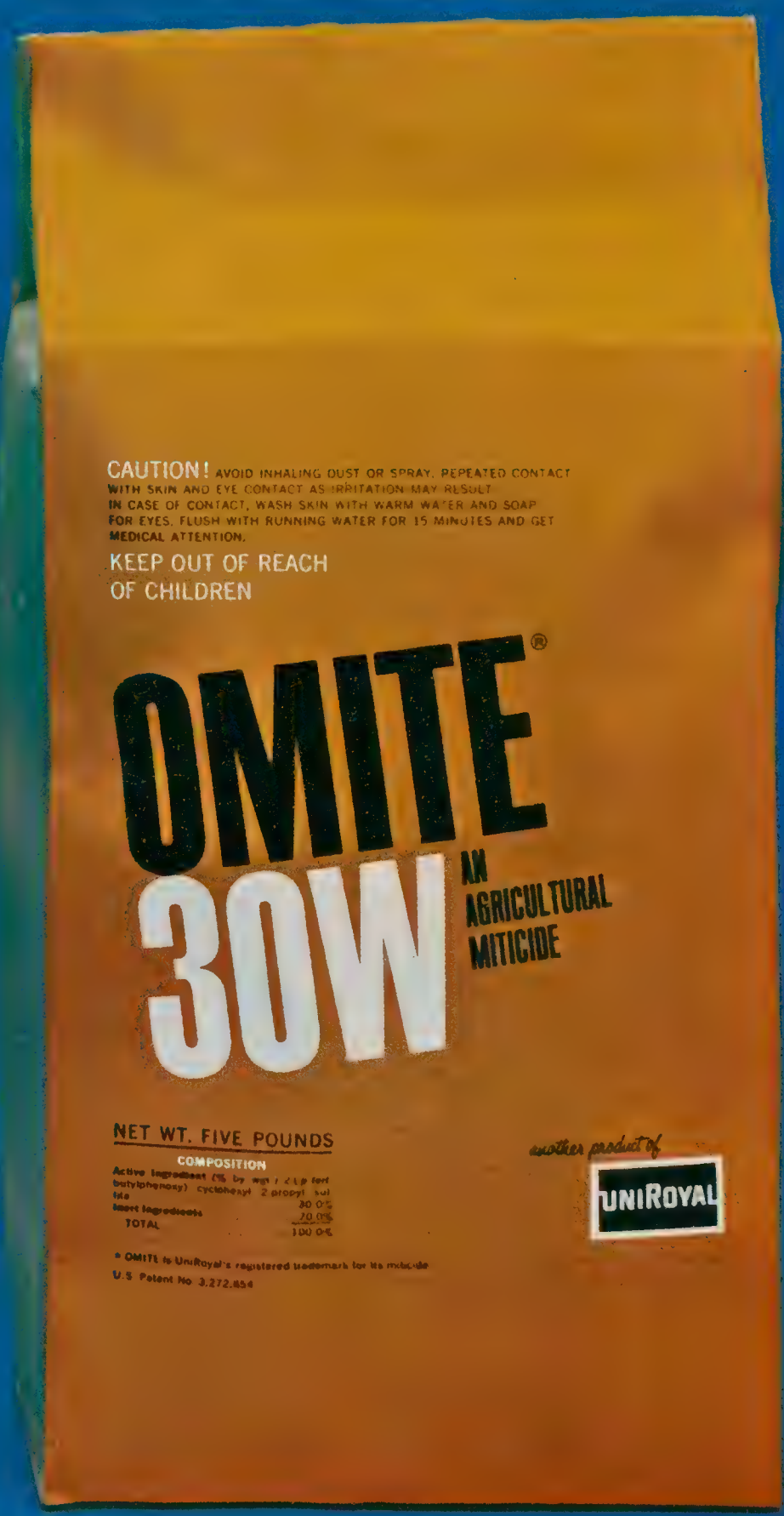

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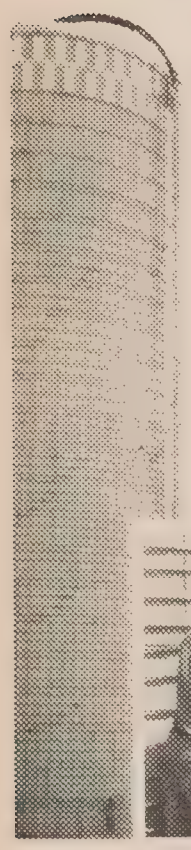

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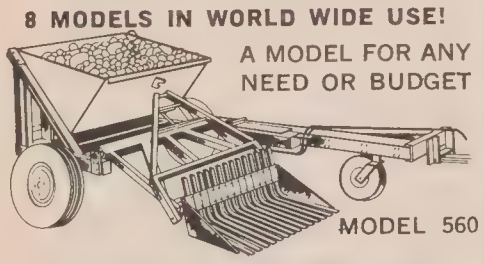

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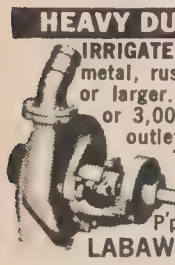

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Dollar Guide

For The Northeast Farmer

CLASS I MILK sales in the New York-New Jersey market were up 141 million pounds January-April 1969 as compared to same period in 1968. Other northeastern order areas saw little change, or actual decline, in Class I sales.

"TRUTH IN LENDING" law goes into effect July 1, 1969. Finance charges and the annual and real interest rate must be disclosed. Law does not fix charges for credit, but does require an understandable disclosure of rate being charged.

FILLED MILK sales in Arizona have showed decline from peak of 11.5 percent of Class I sales reached in August, 1968. Dairy Council of Arizona developed a hard-hitting program that zeroed in on fact that filled milks are not the nutritional equivalent of whole milk.

HIGH BEEF CATTLE PRICES are making cattle feeders happy ... and the experts predict prices will stay high for some time.

Cattlemen should continue to hold slaughter weights down, though, and keep cattle moving to market on schedule. Leaving cattle on feed too long will tend to break market, and those last pounds of gain are costly ones in terms of feeding efficiency.

MINIMUM MILK PRICES at retail are being continued at 28 cents per quart, 51 cents per half-gallon, and 96 cents per gallon in all marketing areas of New Jersey. Decision followed public hearings held over 10 months.

Most milk in the Garden State sells at retail prices above those minimums, whose purpose is to "prevent destructive pricing practices."

SIXTY NEW YORK POULTRYMEN reported to county agents on their feed prices ... ranging from $60 to $100 per ton (average $74.50). Poultryman who can't explain his higher-than-average feed cost in terms of some unavoidable situation needs to do some figuring to change situation.

"PRICING SYSTEM FOR EGGS" is title of Marketing Research Report No. 8500, available from USDA, Washington, D.C. 20250. It sugars off recent study by Economic Research Service and 13 state colleges of agriculture on subject.

EMERGENCY POWER ... write for USDA leaflet 480, "Standby Electric Power Equipment," to: Publications Division, Office of Information, U.S. Department of Agriculture, Washington, D.C. 20250.

The Song of the Lazy Farmer

If neighbor and all slaves like him who work all day with so much vim would stop to ponder on their lot, they'd realize what luck they've got. Like all who work their lives away, those birds complain 'most ev'ry day that they've got twice the cares to bear as other people anywhere. But if they'd knock off work some day and find a quiet place to lay where they could watch the clouds and sky, perhaps they'd realize just why a farmer's life is quite a treat, it's something that is hard to beat because he's got so darn much more than others to be thankful for.

Some folks live where they seldom see a thing as lovely as a tree, and they can't see the sky so blue except in tiny patches through a maze of poles and wires, by gee, or masts for picking up TV. But even if they had a place where they could look up into space, the city's constant clanging din would hem all restful thinking in, or else they'd only see the sky as something in which airplanes fly. That's why, out here where we can rest and get some thinking off our chest, it seems to me it's such a crime to stick to working all the time.

If money doesn't mean anything to you, you won't be interested in a Waldon double implement drawbar!

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The dates for our Hawaiian Holiday are **October 11-25,** and we will visit the four best known islands. On the **Big Island of Hawaii,** we will stay in Hilo, orchid capital of the world, and see the nurseries where these exotic blooms are grown. We'll also visit Hawaii National Park, Akaka Falls (which are higher than Niagara) and pass through the vast Parker Ranch on our way to Kona.

A tour of the historic Kona Coast will take us to the City of Refuge, Captain Cook's Monument, and a mill where the world-famous Kona Coffee is made. Also, Kona waters abound with marlin, tuna, skipjack and bonito, and arrangements can be made for any who wish to try their luck.

Some of the things we'll see on the **Valley Isle of Maui** are Lahaina, first capital of the Islands and where much of the movie "Hawaii" was filmed, and "The Needle," a fern-covered volcanic freak rising 2,000 feet above the valley floor.

Kauai is known as the **Garden Isle.** Here we'll make an excursion up the placid Wailua River to Fern Grotto State Park and take a trip to Waimea Canyon, "Grand Canyon of the Pacific." Our hotel is on beautiful Kalapaki Beach, one of the finest in the Islands. Another attraction is watching the traditional and stirring torch lighting ceremonies, an old and cherished Kauai custom.

On a full day's trip around the **Island of Oahu,** we'll visit Sea Life Park and the Polynesian Cultural Center where six native villages have been constructed, depicting the culture of Samoa, Tonga, the Maoris, Fiji, Tahiti, and Hawaii. On another day we take a cruise through Pearl Harbor to see Battleship Row and the sunken USS Utah and USS Arizona, which have been left where they sank as a permanent memorial to our servicemen who gave their lives on that infamous day of December 7, 1941.

Like all American Agriculturist tours, our Hawaiian Holiday is an all-expense trip, with everything included in the ticket price — all transportation and baggage handling, all scheduled sightseeing, all meals and all tips. Our tour escort arranges everything for you, so you have no travel worries of any kind. All you have to do is relax and enjoy yourself.

Other Tours

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Grand European Holiday, September 11 to October 22. Crossing the Atlantic on the luxurious Queen Elizabeth 2, we will see the most thrilling sights of England, Holland, Germany, Austria, Italy, Switzerland, Luxembourg and Belgium.

Journey to Antiquity, September 16 to October 7. This is a very unusual vacation and includes Belgrade, Dubrovnik, Sveti Stefan, Athens, Delphi,

(Continued on page 20)

Gordon Conklin, Editor
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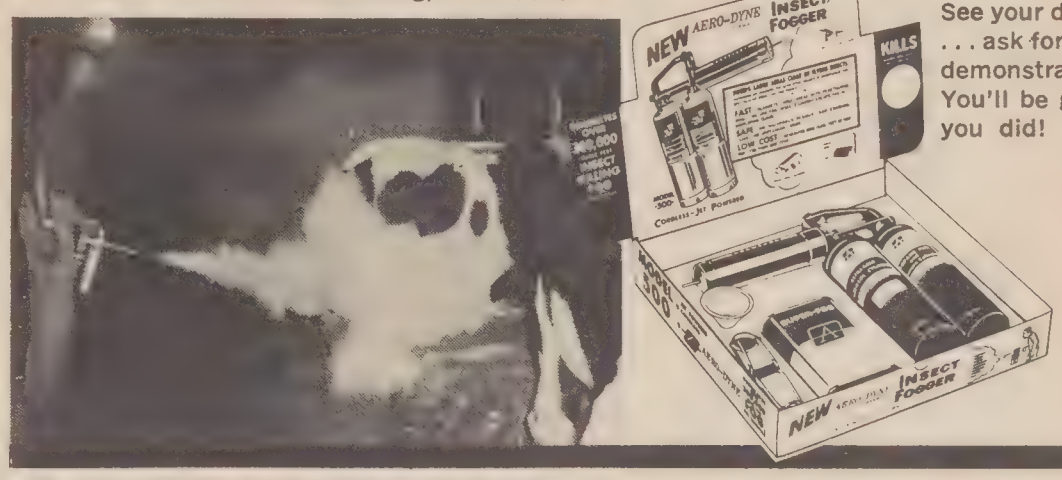

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Dates to Remember

July 7-8 - Dairy-Beef Symposium, University of Delaware, Newark, Del.

July 8 - Weed Control Field Day, Wye Institute, Queenstown, Md.

July 9 - Massachusetts Fruit Growers Association Annual Summer Meeting, John Blanchard Orchard, Sterling, Mass.

July 12 - New England Milking Shorthorn Breeders Field Day and Picnic, Elmknoll Farm of Mr. and Mrs. Robert Bartlett, Salisbury, Mass.

July 13 - Dairy Goat Show, sponsored by Eastern New York Dairy Goat Club, Fairgrounds, Schaghticoke, N.Y.

July 18-19 - New England Sheep and Wool Growers Show and Sale, Luther Belden Pavilion, Eastern States Exposition, West Springfield, Mass.

July 20-26 - National Farm Safety Week.

July 25-26 - New England Green Pastures Dairy Forum, Putney, Vt.

July 26 - Annual Open New York State Sheep Improvement Project Show and Sale, Livestock Pavilion, Cornell University, Ithaca, N.Y.

July 26 - Maine State 4-H and Adult Type and Production Show, Windsor Fairgrounds, Windsor, Maine.

July 26 - New York Angus Association Field Day, Emmadine Farm, Poughquag, N.Y.

July 26 - New York State Junior Hereford Association Field Day, at home of Harold Smith, Sr., North Rose, N.Y.

July 29-Aug. 1 - First Annual Green Mountain Dairy Cattle Show, sponsored by Vermont Purebred Cattle Association, University of Vermont, Burlington, Vt.

July 30 - Tobacco Research Farm Field Day, Upper Marlboro, Md.

Aug. 1-3 - Annual Reunion Pioneer Gas Engine Association, Fairville, N.Y. (just north of Newark in Wayne County).

Aug. 3-6 - American Society of Animal Science Annual Meeting, Purdue University, Lafayette, Ind.

Aug. 3-7 - American Institute of Cooperation Annual Session, University of Illinois, Urbana, Ill.

Aug. 5-7 - Empire Farm Days, near Greigsville, N.Y.

Aug. 9 - New York Junior Angus Association Field Day, Maple Avenue Farm, Earlville, N.Y.

Aug. 10-13 - 24th Annual Meeting Soil Conservation Society of America, Fort Collins, Colo.

Aug. 13 - 15th Annual Meeting Eastern Apicultural Society of North America, Cornell University, Ithaca, N.Y.

Aug. 13 - Annual Holstein Connecticut Black and White Show, Tolland County Agricultural Center, Rockville, Conn.

Aug. 13 - 57th Annual Open House Connecticut Agricultural Experiment Station, Lockwood Farm, Hamden, Conn.

Aug. 14 - Massachusetts Black and White Show, Mallary Arena and Cow Palace, West Springfield, Mass.

Aug. 14-17 - New York Steam Engine Association Pageant of Steam, Roseland Park, Canandaigua, N.Y.

Aug. 16 - New York Shorthorn Association Field Day, Sangamon Farm, Dewittville, N.Y.

Aug. 16-17 - Lumberman's Roundup, Middlebury, Vt.

Aug. 19-21 - Birch Symposium, University of New Hampshire, Durham, N.H.

Aug. 21-22 - New England Grain and Feed Seminar, University of New Hampshire, Durham, N.H.

Aug. 24-26 - Massachusetts 4-H Dairy Show, Mallary Arena and Cow Palace, West Springfield, Mass.

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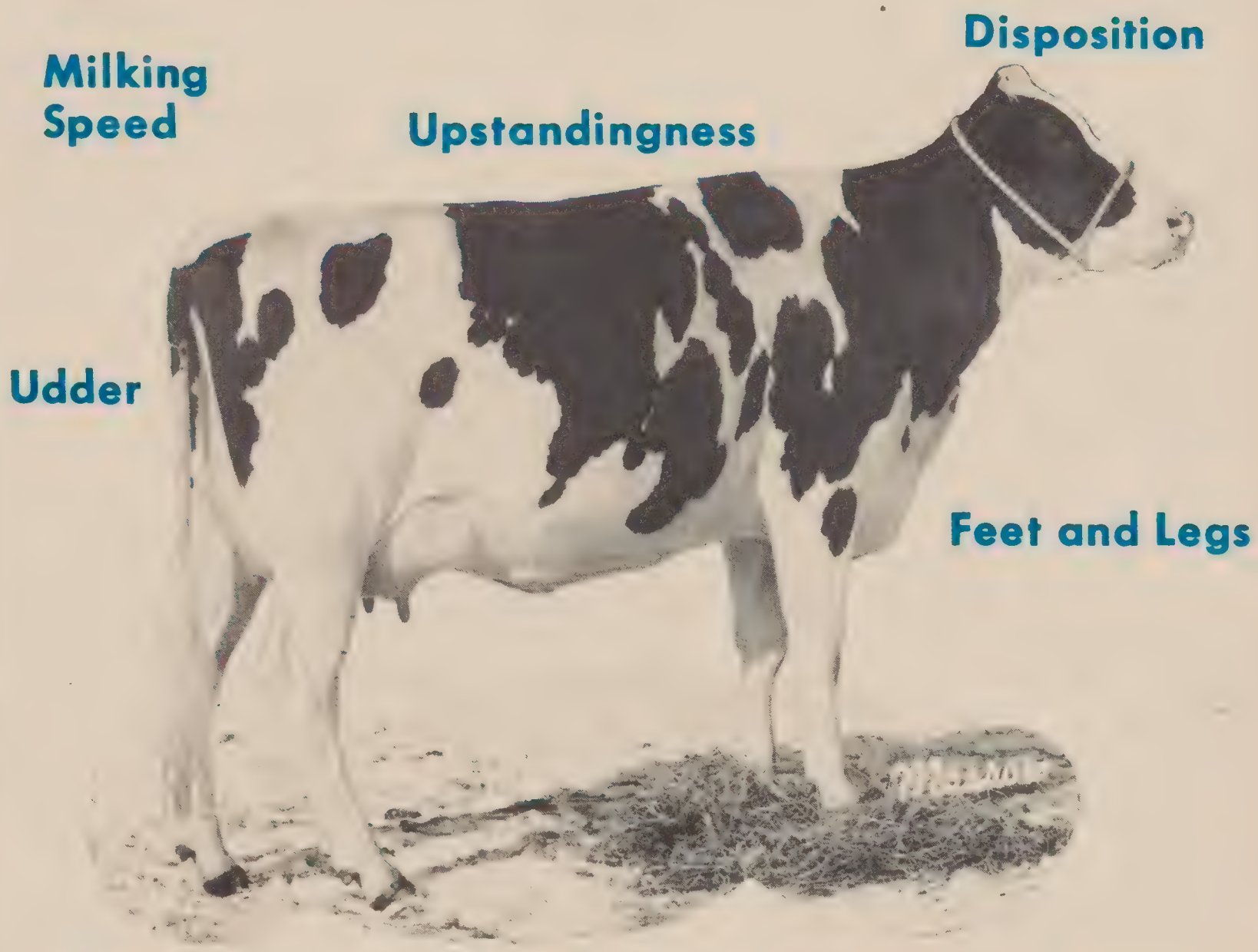

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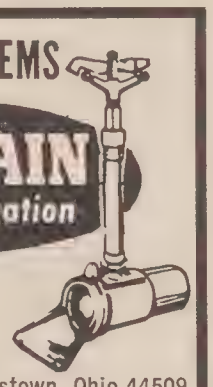

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STARK BRO'S BIG NEW 1970 Catalog free! Spectacular full-color display of Giant-size apples, peaches, nectarines (fuzzless peaches), pears, cherries, apricots, plums from Dwarf, Semi-Dwarf, standard size trees. Ornamentals, roses, etc. Stark Bro's., Dept. 30370, Louisiana, Missouri 63353.

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SPARROWS EAT PROFITS! Get new, improved trap. Guaranteed satisfaction. Free particulars. Roy Vail, Antwerp 10, Ohio 45813.

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Alar — In 1968, approval was granted for use of Alar on apples. When properly used, it can slow the tree-ripening process, and make a firmer fruit. The harvest period is extended . . . of special importance with McIntosh. Fruit size is generally checked, with the degree of reduction depending on a number of variables.

It does not have drop-control effect when applied in the fall . . . it should be applied about 45 days before harvest to give drop control.

On nonbearing trees, Alar can reduce vegetative growth and promote flower bud formation for bloom the following year.

Grapes — Mechanical harvesting of grapes on a commercial basis became a reality in New York State for the first time in 1968. At least ten harvesters went into operation during the past season, and 40 more machines are expected to join the ranks this year.

With 50 mechanical harvesters expected to be in vineyards this fall, about half of the annual grape output would be harvested mechanically. Harvesting cost by machine during the past season averaged $20 per ton of grapes as compared to $35 spent for hand-picking.

A recent study involving four harvesters showed that each machine replaced 62 workers on the average and reduced the total cost for 939 tons harvested by more than $14,000.

One of the machines did even a better job, doing the work of 95 pickers. It cut down on the total harvest cost by more than $29,000 in one season.

Savings for processors and wineries also may be substantial, because bulk handling should reduce labor cost and increase plant efficiency.

CA News — Research at Purdue University involves an experimental Styrofoam-dome CA storage. The dome took 5 men only 12 hours to build, and it has immense structural strength.

Tectrol Division of Whirlpool Corporation no longer makes generators for CA storages. The Trans-Fresh Corporation is an outgrowth of Tectrol, but it builds generators solely for transit vehicles.

Tests using CA storage for a host of perishable commodities are in the experimental stage.

Herbicide — Professor William J. Lord of the University of Massachusetts reports: Paraquat is worthy of consideration by orchard growers having past difficulties with herbicide injury. This herbicide becomes inactive on contact with soil and therefore presents no problem of residue.

However, at least one repeat application during the summer will be necessary for season-long weed control. Since soil moisture is generally more limiting in the late summer than during May and June, the best timing for the repeat application, in order to enhance trunk growth and fruit size and to control annual weeds, is mid-July and later.

Those growers who like the quick "knock-down" of weeds with Paraquat, but wish to avoid the necessity of a repeat application during the year, could apply a mixture of Paraquat **plus** simazine **or** diuron. The spray mixture should keep the treated area relatively free of weeds during the growing season.

This is the new Entomology-Plant Pathology Laboratory at the New York State Agricultural Experiment Station at Geneva. It features a six-story research tower, an administrative wing, and 20,000 square feet of greenhouse space. Total cost: nearly 5 million dollars . . . expected benefits to northeastern agriculture: many times that figure.

VEGETABLES

Grow Marigolds — Experiments over the past three years at the Connecticut Agricultural Experiment Station have shown that common marigolds are effective as a biological control of meadow nematodes. The roots produce a chemical that kills the nematodes.

The marigolds must be grown for a full season to give effective control, and benefits become very apparent when the practice is continued for several years. Such plants as petunias, zinnias, sweet william, tomatoes, strawberries, and many others used in the Connecticut experiments grew better when meadow nematodes were controlled. A complete report on the experiments can be obtained from Publications, Box 1106, New Haven, Connecticut 06504. Ask for Bulletin 701.

Systemics — Researchers W. A. Rawlins and W. C. Glidden of the New York State College of Agriculture experimented in 1968 with four systemic insecticides for potatoes . . . Meta-Systox-R, Azodrin, Bidrin, and Furadan. All these chemicals are absorbed by the plant, and translocated throughout the plant structure . . . but pose no tuber-residue problem by the time harvest rolls around.

They conclude that biweekly applications of either of these systemics will control insects, including leafhoppers and aphids.

Getting Around — Golden nematode, the most serious pest threatening the American potato industry, has been found on a potato farm in New Castle County, Delaware, and New Jersey growers have expressed concern over the nearness of the infestation to their operations.

Before the discovery of the Delaware infestation, the golden nematode was known to exist only on Long Island and in New York State. It is a tiny, eel-shaped worm that attacks potatoes and tomatoes. It does its damage by working itself into the roots and feeding on the juices in the cells. Heavy reductions in yields result.

It is one of the most difficult pests to control. It has ruined so much of Europe's potato land that many countries limit potato growing to one crop every four years, and some areas have abandoned potato growing.

Tomato Culture — For tomato growers interested in new developments in greenhouse tomatoes, a completely revised manuscript entitled "Production of Greenhouse Tomatoes in Ring or in Trough Culture" is hot off the press. Authors are Professors Ray Sheldrake and Stewart Dallyn of the Vegetable Crops Department at Cornell. For your free copy, write to: Ray Sheldrake, 165 Plant Science Building, Cornell University, Ithaca, New York 14850.

Farm too small for you afford Uni-System?

Over half of all Uni-System owners far less than 500 acres. These "Uni price may help you answer the question.

If you think that you need a big farm to justify the expense of harvesting self-propelled, you may be in for a surprise. A pleasant one. More than half of all Uni owners farm less than 500 acres. Some less than 200. Others more than 4,000. Because Uni can be as big or as small as you want it to be.

With Uni, you start with one of three interchangeable Uni Power Units, 80 or 110 available PTO h.p. Cost: about $7,300* for the No. 701 with cab. Once you own the Power Unit, you add harvesting units as you need them. They ride on (and are powered by) the one Power Unit. This way you can assemble a fleet of self-propelleds, if you like, to harvest your crops — for less than the cost of individual self-propelled machines.

Uni-System offers many combinations of interchangeable equipment to get your jobs done with the least amount of bother and fuss. Stop in and see your New Idea Uni dealer and listen to what he has to say. We think you'll like what you hear.

*All prices shown are suggested list prices, fob factory, plus set up and freight.

Uni-Combine

Toughest, heaviest 36-inch cylinder of any combine near its capacity and price. Uses 2- or 3-row cornhead. Suggested price including 3-row stripper plate cornhead: *about $7,450**. (11- or 13-foot grain platform available.)

Uni-Picker

Uses any 2- or 3-row Uni cornhead. Huge husking bed has 312 Flexi-Fingers on powered presser wheels to keep ears in line and moving. Suggested price including 2-row stripper plate cornhead: *about $5,550**, without cornhead, *about $2,925**.

Uni-Shellers

Two sizes, both "cage type" for ge shelling, minimum kernel dama fewer adjustments. Big sheller hand up to 4 narrow rows at a pass. S gested price of big sheller with 3- narrow row cornhead: *about $7,70* without cornhead, *about $2,700**

ni-Forage Harvester

es windrow pickup, direct cut at- chment, 2- or 3-row crop head. ount a Uni stripper plate cornhead ear corn feed making. Suggested ce including windrow pickup and row crop head: *about $5,600**.

Uni-Tool Carrier

Can be equipped with either a fixed or a folding bar to handle any make of unit planters — up to eight 30" rows. Suggested price of tool carrier and tool bar, for 8 narrow rows, guage wheels and hydraulic markers: *about $1,575**.

Uni-System — system that saves you money.

AVCO NEW IDEA FARM EQUIPMENT

Coldwater, Ohio 45828

UNDER-COVER FARMING

Could the four seasons become a thing of the past through controlled environment inside giant inflatable structures such as this transparent plastic "greenhouse"?

This structure was developed by The Goodyear Tire & Rubber Company in a cooperative research project with The Cleveland Greenhouse Vegetable Growers' Cooperative Association. It covers an acre of land on Pretzer Farms, near Wooster, Ohio. The obstruction-free enclosure permits the use of large farm equipment, and Pretzer Farms plans to grow three crops a year in the new greenhouse.

In addition to enabling farm land to be used year-'round, the experimental greenhouse may be the forerunner of structures capable of enclosing entire communities. Goodyear researchers are continuing tests to increase the usefulness of the inflatable enclosures, and predict that they may be widely used as a means of environmental control by the mid-1970's.

For more information, write to News Bureau, The Goodyear Tire & Rubber Company, Akron, Ohio 44316.

BHL

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SUMMERTIME BERRIES

by Alberta Shackelton

Nothing tastes much better on toast or warm biscuits than raspberry jam, and we think you'll also like our recipe for currant and raspberry jelly. Make some to enjoy next winter.

NATURE REALLY splurges in July with its short but abundant harvest of berries. Blueberries, raspberries, blackberries, currants, gooseberries, and the wild huckleberries sometimes available at roadside stands (with elderberries coming later in the season) offer many a taste treat. Of course, you will enjoy some of these with just sugar and cream, but don't forget the good salads and desserts made with these fruits, as well as the jellies, jams and frozen products which prolong their season long after summer days are gone.

FREEZING. Raspberries, blueberries and blackberries may be **dry-packed** (no sugar); simply fill freezer containers to top, seal, label and freeze. They may also be **tray-packed** (no sugar). Spread a single layer of berries on shallow trays, freeze, and then package promptly, filling containers to top; seal, label and freeze.

To freeze currants, stem and remove any soft fruit, crush and **sugar-pack;** combine ¾ cup sugar with 1 quart fruit, pack into containers, leaving 1 inch headspace. Raspberries may also be sugar packed; use ¾ cup sugar to 1 quart fruit, mix gently until some juice is drawn from fruit and most of sugar is dissolved. Pack containers to top, seal, and freeze.

Blackberries, raspberries and blueberries may also be **sirup-packed;** use a sirup made with either 3 or 4 cups sugar to 1 quart water. Make sirup in advance by bringing sugar and water to a full rolling boil and then chill. Place prepared berries in sturdy rigid containers and cover with sirup, leaving a 1-inch headspace for expansion during freezing. Place small piece of crumpled moisture-resistant paper between lid and fruit to keep fruit submerged.

Raspberries, currants and blueberries are featured in the following recipes. My longtime friend, Mrs. Fred Foster (Loraine), of Afton, New York, shares her recipe for a different blueberry pie with us.

CURRANT AND RASPBERRY JELLY

1½ quarts fully ripe red currants
1½ quarts fully ripe red raspberries
6½ cups sugar
1 box powdered fruit pectin

Crush currants thoroughly, add ½ cup water, and bring to boil. Simmer, covered, 10 minutes. Crush raspberries thoroughly and combine fruits. Place in moistened jelly bag and squeeze out juice.

Measure or weigh juice into a 6 or 8-quart saucepan. You will need 5 level cups or 2½ pounds of juice. If there is a **slight** shortage of juice, add water. For softer jellies, use ¼ cup more juice; for stiffer jellies, use ¼ cup less juice.

Measure sugar; set aside. Mix powdered pectin with juice in saucepan. Over high heat, quickly bring mixture to **hard boil,** stirring occasionally. At once add sugar. Bring to **full rolling boil** (a boil that cannot be stirred down); boil hard 1 minute, stirring constantly. Remove from heat; skim off foam with metal spoon. Pour at once into 11 medium-size, washed, scalded and drained glasses, leaving ½-inch space at top.

To seal with paraffin: Cover jelly immediately with ⅛ inch melted paraffin. Cool and cover with loose fitting lids. (For use within 2 months, store in refrigerator without paraffin seal, but with lid).

To seal without paraffin: Use jars with two-piece metal lids. Pour jelly immediately into jars, leaving ⅛ inch space at top. Place lids on jars, screw bands on tightly, and invert jars. When all are sealed, stand upright; cool.

SPICED BLUEBERRY JAM

1½ quarts fully ripe blueberries
2 tablespoons lemon juice
1 box powdered fruit pectin
4 cups sugar
¼ to ½ teaspoon each cloves, cinnamon and allspice (or your own desired combination)

Crush thoroughly the ripe blueberries. Measure 4 cups into a large saucepan. Add lemon juice and stir in the spices. Measure sugar and set aside. Combine fruit pectin with prepared fruit and mix well.

Bring to a hard boil over high heat, stirring constantly. At once stir in sugar. Bring to a **full rolling boil** and boil hard 1 minute, stirring constantly. Remove from heat and skim off foam with metal spoon. Then alternately stir and skim for 5 minutes to cool slightly and prevent floating fruit. Ladle quickly into 8 medium-size, washed, scalded and drained jelly glasses. Follow directions for sealing with or without paraffin as described under previous recipe.

BLUEBERRY or BLACKBERRY ROLL

2 cups all purpose flour
3 teaspoons baking powder
½ teaspoon salt
3 tablespoons sugar
⅓ cup shortening
1 egg
⅔ cup rich milk or half and half
2 cups blueberries or blackberries
½ cup sugar
Dash cinnamon if desired

Sift dry ingredients and cut in shortening until mixture resembles coarse crumbs. Combine slightly beaten egg and milk and add all at once, stirring with a fork until just moistened. Turn dough onto a lightly floured board and knead lightly for a few seconds. Roll dough into oblong about 8 by 10 or 12 inches. Cover dough evenly with berries, except for 1 inch along both long sides. Sprinkle sugar evenly over berries and sprinkle cinnamon lightly over all, if used.

Starting at one long side, roll up dough like a jelly roll. Brush edge with soft butter and pinch to roll of dough. Place in greased shallow oblong baking pan and bake until lightly browned in a hot oven (400°), 25 to 30 minutes. Cut in slices to serve and serve warm with Blueberry Sauce (for Blueberry Roll), with hard or lemon sauce, or lightly sweetened whipped cream. Serves about 8.

For **Blueberry Sauce,** mash 2 cups blueberries lightly and stir in ⅔ cup sugar, 1 tablespoon cornstarch, dash salt, and 1 tablespoon lemon juice. Cook until clear and slightly thickened. Chill. Makes about 2 cups.

LORAINE'S BLUEBERRY PIE

1 cup sugar
3 tablespoons cornstarch
⅛ teaspoon salt
4 cups blueberries
1 tablespoon lemon juice
1 tablespoon butter
1 9-inch baked pie shell
Whipped cream

Combine sugar, cornstarch and salt. Stir in 1 cup water and 1 cup of the blueberries. Cook over low heat until thickened. Stir in lemon juice and butter, then carefully add the remaining three cups of blueberries. Cool and spoon into baked crust. At serving time, cover pie with slightly sweetened whipped cream and scatter some blueberries over top. Serves 7 or 8.

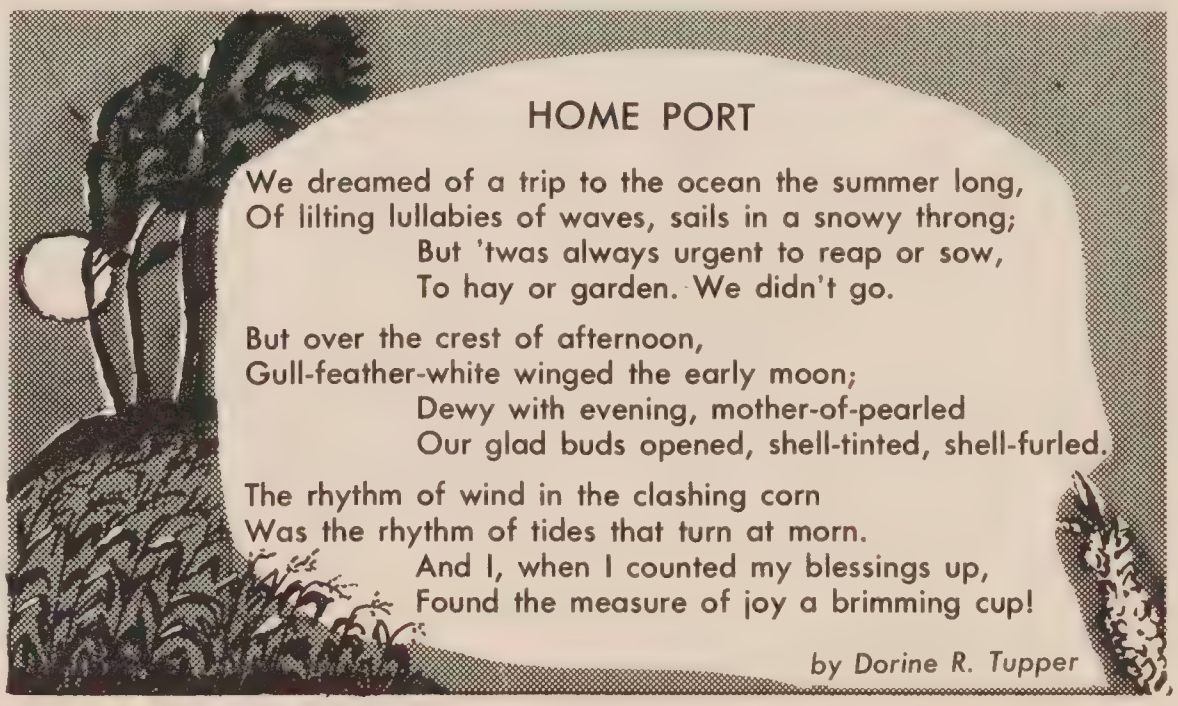
RASPBERRY TARTS GLACE

Pastry for 2-crust, 8 or 9-inch pie
1 package (8 oz.) cream cheese, softened
¼ cup light cream
3 tablespoons sugar
1 tablespoon grated lemon rind
1 quart large red raspberries
3 to 4 tablespoons currant or raspberry jelly, melted

Divide pastry into 8 to 10 parts, depending on thickness of tart shell desired. Roll each piece into a 4-inch round and fit into individual pie or tart pans. Prick with fork to prevent puffing during baking. Place pans on a baking sheet and bake in a very hot oven (475°), 8 to 10 minutes, or until lightly browned. Cool and remove from pans.

Blend cream cheese, cream, sugar and lemon rind. Spread cheese mixture carefully in bottom of tart shells and chill well. Place raspberries closely together, stem end down, over cheese layer. Brush melted jelly on tops of berries to glaze. Chill.

Note: Blueberries may be substituted for raspberries. Also, regular vanilla pudding mix, made according to package directions, then cooled and combined with ½ cup dairy sour cream, may be substituted for cream cheese mixture.



HOME PORT

We dreamed of a trip to the ocean the summer long,
Of lilting lullabies of waves, sails in a snowy throng;
But 'twas always urgent to reap or sow,
To hay or garden. We didn't go.

But over the crest of afternoon,
Gull-feather-white winged the early moon;
Dewy with evening, mother-of-pearled
Our glad buds opened, shell-tinted, shell-furled.

The rhythm of wind in the clashing corn
Was the rhythm of tides that turn at morn.
And I, when I counted my blessings up,
Found the measure of joy a brimming cup!

by Dorine R. Tupper

AROUND the HOUSE

New from **Chas. Pfizer & Co., Inc.**— Un-Burn for treatment of sunburn; comes in aerosol, lotion or cream form. Relieves pain in seconds, helps prevent infection, moisturizes and conditions dry, parched skin. Available nationally for $1.39 to $1.98.

This new Custom Countertop from **Corning Glass** provides a complete or partial countertop surface of glass-ceramic that will not burn, scorch, stain or mar, according to the manufacturer. Now the familiar problem of where to safely set a hot pot, dice the beets or cut the roast has been eliminated, and the textured-surface or smooth-finish pieces add a new decorative effect to kitchen countertops.

A new wrought iron product called **Wind-O-Guard** makes it impossible for youngsters to crawl or fall from upstairs windows, also protects against intruders. Wind-O-Guard adjusts to fit all windows 24 to 42 inches wide; can be securely locked in place or bolted to window frames.

For information and orders, contact **Locke Manufacturing Co., Dept. WG, Lodi, Ohio 44254.** Model shown sells for about $5.50 postpaid.

Helpful Hints

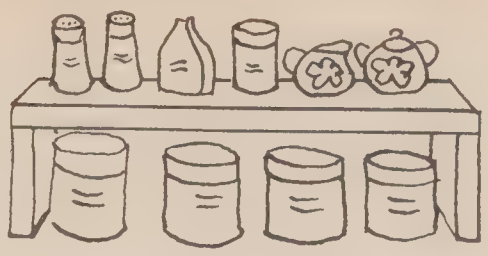
Keep small screw-top jars that samples come in for storing small leftovers of jam and jelly. Saves getting sticky reaching to the bottom of a taller jar. An iced tea spoon is good for reaching the last quarter of a jar.

When cutting flowers are gone in your garden, try arranging a variety of foliage, twigs, weed tops, etc., for decoration. They may be fresh or dried. Combine brown with evergeens for variety.

Keep an extra pair of sun glasses on the dash or in glove compartment of your car. You may break or lose a pair when out for the day or on a trip.

If ants, silverfish or roaches are a problem in your house, use bug-proof shelf paper. It costs a little more but is worth it.

If shelves in cupboard or pantry are too far apart for small items, have someone make you some half-shelves (as per illustration). Also, a whatnot shelf



painted to match your kitchen is a good place to put jars of spices, celery and onion salt, parsley flakes, etc.

Crush small branches or twigs of evergreens and stuff in flower containers to hold stems of flowers or foliage.

Use plastic cutlery tray in desk or kitchen drawers to hold small items, such as rubber bands, pencils, scotch tape, etc.

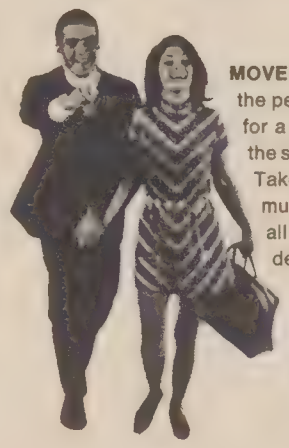
Use vinegar to clean lime rings from glass flower bowls. Try Wright's silver cream with caution to clean old, tarnished oil paintings. It may work wonders, but it depends on the finish.

Hard driving businessmen & weekend swingers -take off!

WHY FIGHT IT! If business appointments take you more than 100 miles away, the car is a very old fashioned way to travel. For just one low air fare you can jet Mohawk back and forth across the east for five straight days. You can set up a whole series of sales calls in any of 75 cities in 10 states. The airline is yours for a whole work-week. Make positive

reservations and then fly out Monday and fly back Friday. Or commute back and forth every day. Budget minded businessmen know that a 1000-mile trip by car costs at least $120 (@ 12¢ a mile). The same distance with Mohawk's CONSECUTIVE EXECUTIVE FARE costs only *7¢ a mile!*

5 DAYS UNLIMITED AIR TRAVEL "Consecutive Executive" $69.95



MOVE OUT! See as many Mohawk cities as you can in two days for one low fare. Mohawk has the perfect answer for young married couples looking for a quick getaway . . . young "swingles" looking for a weekend lark . . . any age looking for travel thrift. It's WEEKENDS UNLIMITED, the swingingest fare in the air. Two days unlimited air travel on Mohawk to any of 75 cities in 10 states. Take off after 12:01 a.m. Saturday. Fly to as many cities as you can and back. Your trip must begin on Saturday and your return trip must begin before 6:00 p.m. Sunday. Mohawk is yours for all the hours in between. Make positive reservations starting anytime after 12 noon the Wednesday before your departure. And add Monday to your weekend for an additional $20.00 for *Long Weekends Unlimited.*

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Call Mohawk or your TRAVEL AGENT.

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With Our ADVERTISERS

A heavy duty semi-mounted moldboard plow, with hydraulic self-reset beams to maximize daily acreage by nonstop plowing, has been introduced by Massey-Ferguson, Inc.

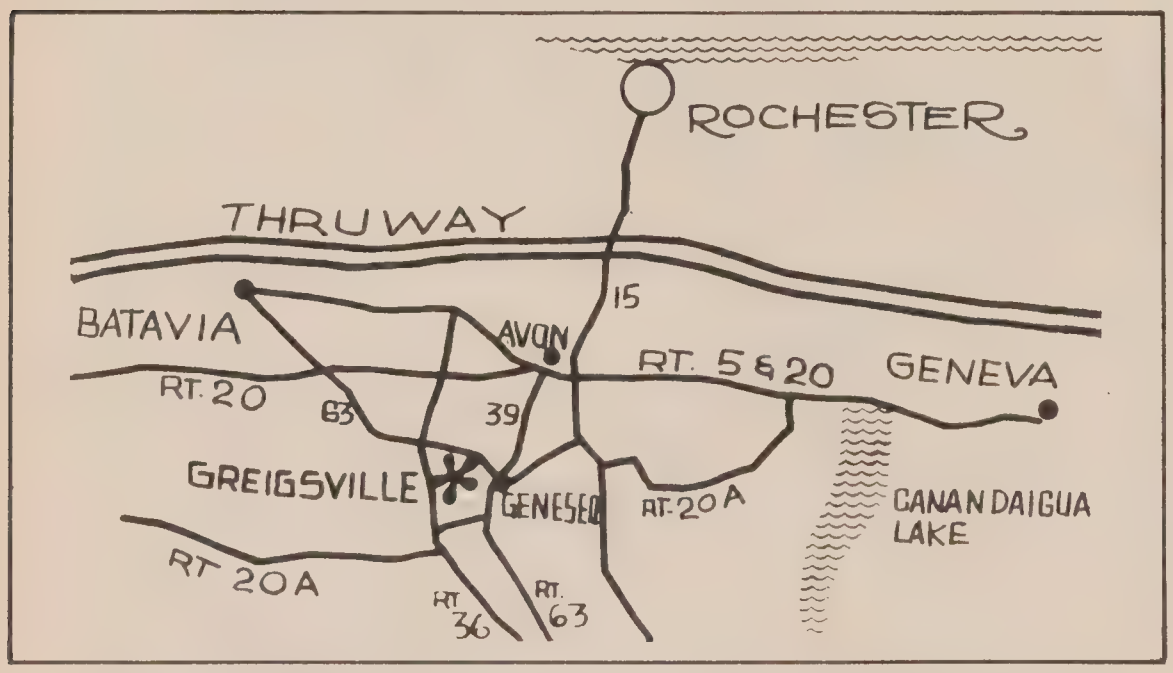
Among the many options for the MF 880 are general purpose, high-speed or semi-deep tillage bottoms to match soil conditions. An optional hitch with a front furrow wheel is available for use when six or more bottoms are used.

Addition of the new rear processing units, the International Multi-Purpose Grinder and Multi-Purpose Sheller, makes the International 234 Corn Harvester a versatile picker-type machine. Field corn can be harvested husked, un-husked, shelled, shelled and cracked, or made available as ground ear corn feed.

A snapper unit with unique stripper plate design handles even small single-cross varieties of seed corn without damage or loss. By adding a simple attachment, the 234 harvests sweet corn fast and clean. It does not have to be removed for field corn.

Capable of operating free of jolting or rocking at high speeds, the Turbo Mower leaves a fluffy windrow of upright hay butts to assure uniform drying of the entire plant. For more information, write the Fahr Machine Company, 18 Hawley Terrace, Yonkers, New York 10701.

Allis-Chalmers forage equipment for 1969 includes the new large capacity Model 782 PTO-driven forage harvester. Features facilitate harvest of large-volume crops required to feed the expanding population of roughage-consuming livestock.



Many AA-RNY advertisers will be represented at the 1969 Empire Farm Days on August 5-7 at a farm owned by William Selden of Avon, New York. The farm is located at the corner of Retsof Road and Chandler Road (see map).

A massive amount of farm equipment will be on display ... and demonstrated under field conditions. Suppliers of a host of other farm inputs will also be on hand ... fertilizers, credit, building materials, A.I. services, etc.

It's a great opportunity to see and learn more about what's new in the technology of farming!

The AA Clothes Line

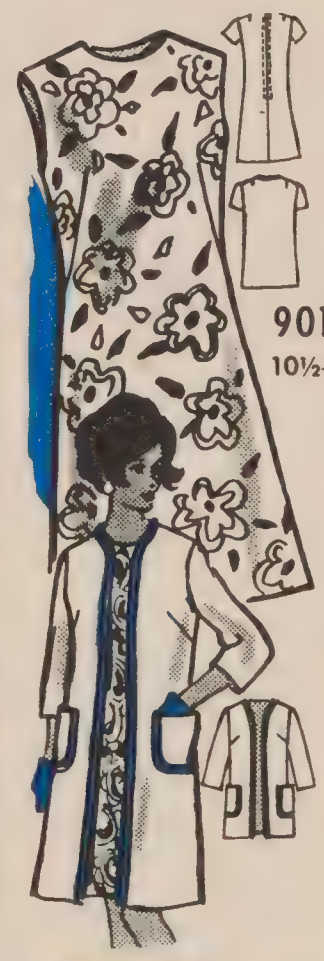
All Printed Patterns

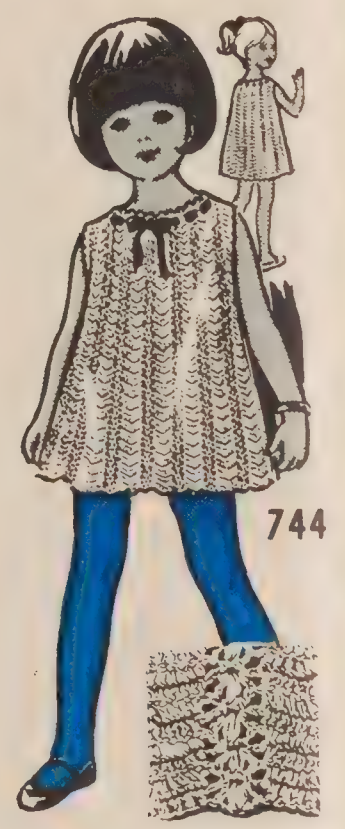
4970. Trio of easy-sew partners. PRINTED PATTERN, New Women's Sizes 34-44. Size 36 (bust 40). Yardages in pattern. ..... 50 cents

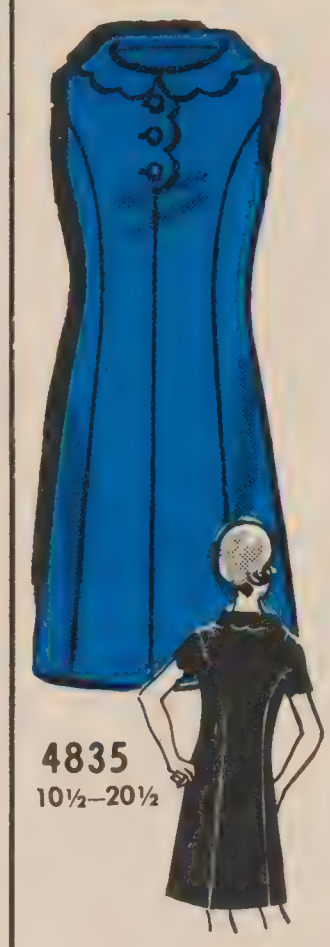
4832. Graceful dress, demi belt. PRINTED PATTERN, New Misses' Sizes 8-16. Size 12 (bust 34) takes 2½ yards 35-inch fabric. ... 50 cents

9010. Easy skimmer, coat, jacket. PRINTED PATTERN; New Half Sizes 10½-20½. Size 14½ (bust 37). Yardages in pattern. ..... 50 cents

4759. Zippy casual, easy to sew. PRINTED PATTERN, Half Sizes 12½-26½. Size 16½ (bust 37) takes 2⅞ yards 39-inch fabric. .. 50 cents







744. Airy dress in quick crochet. Two identical pieces; make of 3-ply fingering yarn. Directions, Sizes 2, 4, 6 included. ..... 50 cents

9460. Curved yoke, shapely panel. PRINTED PATTERN, New Misses' Sizes 8-16. Size 12 (bust 34) takes 2⅞ yards 35-inch fabric. .. 50 cents

4835. Softly scalloped princess. PRINTED PATTERN in New Half Sizes 10½-20½. See yardage requirement in pattern. ..... 50 cents

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Book of 50 Instant Gifts	☐ 50¢	
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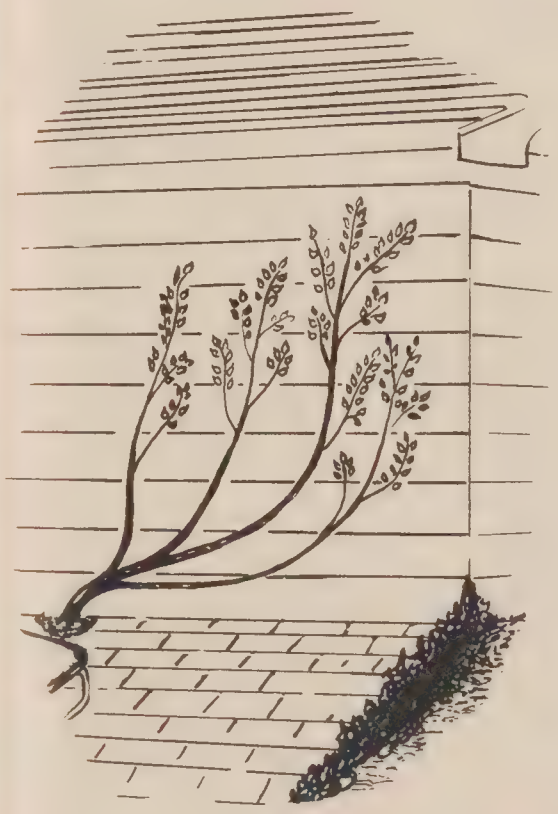
OUTDOOR LIVING AREAS

by Nenetzin White

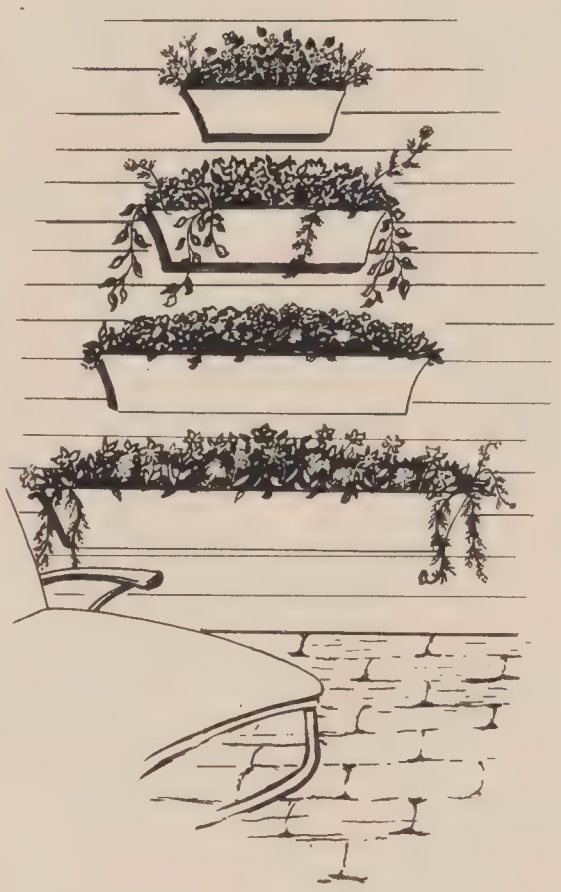
IS YOUR terrace too close to the road? Is it hemmed in by a garage or outbuilding? Or do you have a wall where you would like a mass of color or a nice ornamental tree? Let's go over some hard situations and see how easily they can be remedied and how gorgeous these spots can become.

Perhaps you have a blank wall right near an area that is otherwise perfect for sitting and relaxing. First, find our what direction the wall faces. If you aren't sure, get out your blueprints or the developer's maps. If you have an eastern or southern exposure, you can grow practically any of the flowering plants in this spot. If the area is paved, perhaps you can chisel out places large enough to plant some ornamental trees or shrubs and put them right against the wall.



If space is limited or you want a more exotic effect, espalier these shrubs or trees. Espaliering consists of pinning the branches to the wall horizontally and cutting off the branches that protrude. It used to be customary to espalier in definite forms, such as u's and double or triple u's. The more modern feeling is a sweep perhaps up (vasi-form) or to one side and up (the side with the most sun). These can make your wall a thing of beauty, and by carefully choosing your plant, you can have blossoms in the spring and fruit in the fall. A flowering crabapple or an upright form of cotoneaster with its double rose-like flowers in the spring and glossy red fruit in the fall is ideal.

Another good treatment is a series of window boxes pinned to or hung from the wall. These should be smaller at the top so they will get sunlight. You can make a pyramid form, a step form, or whatever your artistic sense dictates. With an eastern or southern exposure, you can have great blossoms all summer and by using some trailing plants, you can have a cascade or flower falls.



If the road is very close to your house, a hedge or fence is probably the best answer. Evergreen hedges must be placed rather far back to minimize salt damage, and depending on the wind direction, they may dump snow. If you have a westerly wind over your hedge or fence, be prepared for a snow-drop. Don't overlook the possibility of a deciduous hedge; it, too, will keep out a lot of dirt, noise and wind. I enjoy a flowering shrub border in a situation like this. If there is room, you might try one; otherwise, put up a fence to give you as much or as little privacy as you desire. Then you can treat the fence like a wall and decorate your outside living room.

With northern or western exposures, you will have to use yew, evergreen bittersweet, or other plants that will grow with a minimum of sunlight. The evergreen bittersweet should climb for you, and as it matures, should give you flowers in the spring and bittersweet-like fruit in the fall. Hanging baskets filled with plants for either shade or sun will give you spectacular results.

COMING AND GOING

by Mildred Goff

We are so happy when company comes.
We bring out the fruit cake and sugar plums,
Joyfully welcome friend and relation,
Ply them with coffee and conversation.

Another moment of equal delight
Comes when the visitors take their flight
And the house is quiet. Oh, sweet repose!
We're glad when the company comes.
And goes.

For the Farm & Rural Home Bookshelf

We have arranged with the publishers to supply directly to our readers, postpaid, any of the following books at the prices listed.

Books will be shipped direct from the publisher. Please allow 2 weeks for delivery.

Cattle *Crops* *Conservation* *Horses*
Home Grounds *Management* *Contract Farming*

No.	Title	Author	Delivered Price
1	AGRICULTURAL ENGINEERING—A DICTIONARY AND HANDBOOK	Farrell & Albrecht	$9.95
2	ANIMAL SANITATION AND DISEASE CONTROL	R. R. Dykstra	10.00
3	ANIMAL SCIENCE (1969 edition)	M. E. Ensminger	19.75
4	APPROVED PRACTICES IN BEAUTIFYING THE HOME GROUNDS	N. K. Hoover	6.25
5	APPROVED PRACTICES IN BEEF CATTLE PRODUCTION	E. M. Juergenson	6.25
6	APPROVED PRACTICES IN CROP PRODUCTION	Brickbauer & Mortenson	6.25
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8	APPROVED PRACTICES IN FARM MANAGEMENT	I. F. Hall & W. P. Mortenson	6.25
9	APPROVED PRACTICES IN FEEDS AND FEEDING	D. W. Cassard & E. M. Juergenson	6.25
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15	APPROVED PRACTICES IN SWINE PRODUCTION	E. M. Juergenson & G. C. Cook	6.25
16	ARITHMETIC IN AGRICULTURE	T. H. Fenske, R. M. Drake & A. W. Edson	5.00
17	BEEF CATTLE SCIENCE	M. E. Ensminger	14.35
18	CAREERS IN AGRIBUSINESS AND INDUSTRY	Archie A. Stone	7.00
19	CONTRACT FARMING, U.S.A.	E. P. Roy	9.25
20	COOPERATIVES—TODAY AND TOMORROW (1969 Edition)	E. P. Roy	11.25
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Ed Eastman's Page

"Even America Itself"

I never thought I would live to see the day when rioting college students marched into the college offices and classrooms, put the officers and teachers out, and took over complete possession.

In one case the students were armed. One might understand the situation if it had happened at just one college. But it has been going on in some of our oldest and finest institutions across the entire United States. In fact, the disturbance is worldwide.

It is often hard to tell what the students are upset about. In some cases they don't know themselves. They just seem to be upset with everything that **is,** and would like to tear down the whole educational system . . . even America itself.

The students complain about the curriculum, but they have not had experience enough to know what studies are valuable and what are not. Abraham Lincoln, one of the greatest debaters of all time, said that he learned to reason from the theorems of geometry. Think of the thousands of students who have condemned geometry because they had no way of knowing, at their age, how valuable it is.

The curriculum does need correction from time to time and students' suggestions should be listened to. But, on the whole it has stood the test of time, and millions of students have used the curriculum for a foundation on which they have achieved success and happiness.

Another cause of complaint from students is that they should have more voice in the management of the college or university. There is student government in most colleges, but in the final analysis the administrators are hired to run the institution. What do students come to college for . . . to run the business or to get an education?

In general it may be said that never in all history have students, in both the public schools and the colleges, had the educational opportunities that they have today. Never was it so easy to go to college. Maybe that is just the trouble. If every student in high school and college had to work for at least some of his education, there wouldn't be any time to march and riot, and he certainly would appreciate his education more than some do now.

Responsibility goes with privilege and freedom. Let the student show that he is responsible and he will be given more responsibility in college government and in his choice of subjects in the curriculum.

The chief cause of all the trouble from the home through the university is lack of discipline. Many of our boys and girls have had too much of everything, and when they find that life just isn't that way, they refuse to abide by the rules, regulations and laws that have stood the test of time in many generations. Too many young people, and old ones too, for that matter, follow the creed: "If I don't like the law, I won't obey it." The end of that philosophy is anarchy and chaos. Too many children in the home are being ruined by permissiveness. Too many have grown up without discipline, and that has resulted in the taking over of college buildings and rioting on the campuses.

Then, to make matters worse, when the trouble started the college administrators didn't have the courage to stop it before it got out of hand. What is needed is more Teddy Roosevelts, whose philosophy was "speak softly but carry a big stick."

There is one thing I want to make very clear, and that is that of most boys and girls out of the thousands who attend the big

universities and colleges, only a few hundred are responsible for all the trouble.

I also want to make it clear to both the rioting students and the administrators that the public, who in the long run pays the bill, is just about fed up to the point that they are demanding that the administrators straighten out the mess on the college campuses, or get out and let someone take over who has the courage and the ability to do the job.

Haying, Yesterday and Today

Let us say that you are a young man sixteen years old by the name of Johnny Orr, living on a northeastern dairy farm on July 5, 1850, only a hundred and nineteen years ago. It's a large farm for those times, and you belong to a big but typical family of father, mother, two sisters, and three brothers, of which you are the youngest. The morning chores include milking (by hand, of course), the cows turned out to day pasture, and you have just finished breakfast in the big farm kitchen.

Father Orr has smoked his after-meal pipe and announced: "Today we start haying on the south meadow. Let's get at it."

What haying tools would the Orrs and all their neighbors have?

Well, each male member of the family would have his own scythe and snath. And he would be very particular that the blade was sharp, "hung" just right . . . and Johnny Orr would make sure that no other member of the family used his scythe. Hand tools were better then than they are now.

All the boys and their father were in the field, with the father in the lead, promptly at seven o'clock. They mowed steadily until about ten o'clock and were hot and tired. So they were glad to see Mother Orr and sister Ann coming with a big jug of switzel or milk and a pan of new friedcakes.

After a brief rest they returned to the mowing, and mowed steadily until six o'clock . . . with an hour out at noon for a big dinner and a brief rest. With a sharp scythe, each of the Orrs could mow about an acre in a day.

At six they all stopped, did the milking and other chores, ate a big supper, sat on the stoop a little while to let the hot chamber rooms cool off, and then they fell into bed too tired even to dream.

Next day, the Orrs raked the hay with hand rakes and pitched it into big cocks that looked like Indian tepees, to cure and dry.

If it didn't rain, the Orrs began a day or so after mowing pitching the hay on wagons with hay riggings and hauled it to the barn, where it was pitched off by hand and mowed away. Sometimes the hay had to be pitched off on the west side of a shed where the sun blazed down unmercifully.

Haying in the old days started after the Fourth of July and dragged on often until September. It was the big job of the year.

Up until 1850 or a little later every bit of hay was handled by hand, from the scythe to the mow. Haying was the big job of the year requiring much help. But then things began to change, and have continued rapidly to change ever since.

In 1852 the first mowing machine was invented. It was a crude affair, but still it would mow more in an hour than could be done with a scythe in a day. Strange to say, reapers and mowers came about the same time . . . and reapers were often used as mowers by taking off the table or platform.

Hand rakes soon took a back seat to horse rakes, the first of which were walking affairs with two rows of wooden teeth which you raised to dump it. Did you ever see one? Then came the wheel dump rake, followed today by the side delivery rake.

Every farm boy knows the different types of mowers in use on farms today. He knows that only a very little hay is pitched by hand. He knows about tractor-drawn seven-foot mowers, self-propelled windrowers, mower conditioners . . . bale throwers that throw the bales onto the wagons . . . choppers and other inventions that take the hand work out of haying.

If we could wave a magic wand and bring Johnny Orr back today to a big demonstration of modern haying machinery, he would rub his eyes and think the world had gone crazy . . . and maybe he would be right.

Relives His Life

Dear Mr. Eastman:

"I feel strongly constrained to write you today while reading your book, "Journey to Day Before Yesterday." Except my Bible I prize this book more than any other that I own. I suffered a stroke in 1962 and am still paralyzed on my left side, and I have read and reread your book so many times. I relived all the experiences related. . . .

"You can imagine what your book means to me now as I relive places and events of the past. . . .

"Accept my thanks for recalling the days of yore which make me laugh and cry. . . .

"I also go back to the farm and drink the good spring water, and eat the watercress growing along the streams.

"With every good wish, I am."

Guy H. Madeira
Shoemakersville, Pa.

To get a copy, write to American Agriculturist, Department Book, Savings Bank Building, Ithaca, New York 14850. The price is $7.30, including tax.

EASTMAN'S CHESTNUT

Russian Commissar: "Please give report on potato crop in your district."

Peasant: "Is coming wonderful. Under Glorious People's Leader, potato crops is miraculous. If we were putting all potatoes in one pile, they would be making mountain to reach up to the feet of God."

Commissar: "Fool, you know there is no God."

Peasant: "True, Comrade Commissar, but there are no potatoes either."

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TRAVEL

ONE OF OUR most popular services to readers is sponsoring and arranging tours and cruises. They are popular because the worries about foreign customs, handling baggage, value of foreign money, language barriers, tickets, reservations, etc., can be forgotten. Trained, experienced escorts take care of everything for you—even tipping. For details on our future tours, write American Agriculturist Tours, Box 370, Ithaca, N.Y. 14850.

FLORIDA KEYS FUN motel and marina on 50 sunny acres. Houseboat Rentals. Write for brochure. Plantation Harbor Motel, Box 26N, Islamorada, Florida 33036.

EUROPEAN ART TOUR — $699.00 — 22 days, starting November 12. Guided visit to famous galleries and art museums including Rubens Home & Gallery, Antwerp; Rembrandt in Amsterdam; Louvre & Versailles, Paris; Prado in Madrid; Venice, Rome, Ravena, Florence in Italy and others. Travel by deluxe coach, stay in picturesque inns, enjoy stimulating companions. Our price includes everything. Reserve now. For information: Phone (716) 853-5591 or write Shanly International Corporation, 305-A Dun Building, Buffalo, N.Y. 14202.

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ALL ILLUSTRATED Fox and Coyote trapping methods. Free circular. Jack Nichols, Carmel, New York 10512.

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WANTED BEESWAX. Contact James G. Whittlesey, Lyons Falls, New York 13368.

PRESIDENTIAL CAMPAIGN BUTTONS bought. Highest prices paid. Cereghin, 703 Bolton Walk #204, Goleta, California 93017.

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RAISE RABBITS for us on $500 month plan. Free details. White's Rabbitry, Mt. Vernon, Ohio 43050.

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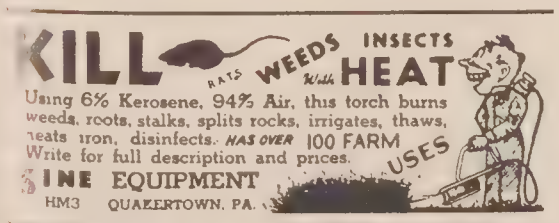

SERVICE BUREAU

For The Northeast Farmer

by M. A. Parsons

SERVICE BUREAU CLAIMS RECENTLY SETTLED

NEW YORK	
Mrs. Ralph B. Weatherbee, Attica (refund on film)	$ 5.00
Mr. Abram Bushart, Marion (gas tax refund)	194.00
Miss Helen Metcalf, Dover Plains (refund on order)	19.06
Mrs. Kenneth L. Fall, Chateaugay (refund on saw)	52.45
Mrs. Kathryn Hansthorn, Hunter (refund on order)	1.00
PENNSYLVANIA	
Mr. W. M. Black, Fallentimber (overpayment refund)	30.00
NEW JERSEY	
Mr. Halsey D. Genung, Pittstown (refund on books)	7.00
Mr. Wm. Happel, Pittstown (damage settlement)	250.00
MASSACHUSETTS	
Mr. R. W. Sparrell, Holliston (overpayment refund)	5.00
RHODE ISLAND	
Mrs. Carl Broadwell, Ashton (refund on order)	9.98

HAY — HAY

In spite of previous warnings, we still receive scattered complaints against hay dealers who have failed to pay for all loads picked up.

We were notified recently of a New York State man who has been charged with acting as a dealer and broker and selling farm products without a license. He was accused of purchasing hay and straw from a local farmer and then taking the products to another location where alleged sales were made. The charge is in violation of state law requiring a license to act as a dealer or broker.

Before selling your produce, make sure the buyer is currently licensed and bonded with the New York State Department of Agriculture and Markets. All licensed operators carry cards showing the expiration dates of their licenses.

Also, when you deliver your produce to a dealer or his truck picks up your produce, get a signed receipt showing date, dealer's name, quantity of produce, net price to grower, and the signature of the person receiving the produce.

You may verify the license of an operator or buyer, on any weekday from 8:30 a.m. to 4:30 p.m., by calling Albany, 518-457-4990 or, if the line is busy, call 518-457-2774.

CAN YOU HELP ?

Would like instructions for making belts, jewelry, dishes, etc. out of nuts from black walnut trees. Write Mrs. Mike Polowchak, R.D. 2, Berwick, Pa. 18603.

* * *

Mrs. Ruth Packard of Jericho, Vt. wants a copy of "No Drums."

* * *

Would like to obtain a copy of Harry Irving Hancock's book entitled "Blackmail" published in 1899 by Street and Smith. Please contact Mrs. E. N. Wood, 16603 Turner, Detroit, Mich. 48221.

Dairy Farmer Seriously Hurt When Kicked By Cow

Mr. Herman Kilpatrick of Walton, N.Y. received $2218.21 from local agent Bob Utter of Delhi, N.Y.

During milking time a cow kicked Mr. Kilpatrick in his right hand jamming the thumb back and injuring the wrist. He thought at first it was just a sprain so tried to do his chores for a few weeks with but a splint on. His condition grew worse and soon he found himself in the hospital where he spent twenty nine days under the care of a bone specialist. Out of the hospital he wore an arm cast for weeks. Following that he repeatedly returned to the hospital for physiotherapy treatments to help regain use of his hand and arm. During all this it was necessary to hire help to carry on the dairy.

Because Mr. Kilpatrick owns several North American policies he received $1125 of weekly income benefits and $1093.21 of medical expense benefits for a total of $2218.21.

OTHER CLAIMS PAID

Kenneth Gifford, Medusa, N.Y. — Caught in beaters—broke arm	$385.00
Chalmore Wolcott, Fillmore, N.Y. — Auto accident—mult. injuries	1032.00
Curtis Searl, Jr., Friendship, N.Y. — Fell off roof—broke wrist	228.59
Robert E. Stone, Randolph, N.Y. — Fell from scaffold—inj. shoulder	250.63
Charles H. Howard, Little Valley, N.Y. — Fell off roof—injured hip	184.15
Donald Doody, Auburn, N.Y. — Auto accident—injured face	1550.95
James Mahaney, King Ferry, N.Y. — Thrown by heifer—inj. back	515.70
Dorothy M. Aikens, Clymer, N.Y. — Stepped on stone—inj. foot	324.80
Joseph C. Muscarella, Jamestown, N.Y. — Slipped off log—inj. knee	348.64
Elsie Stafford, Norwich, N.Y. — Tripped fell—inj. shoulder	181.07
Robert Goodale, Cortland, N.Y. — Farm truck accident—broke leg	705.00
Earl J. Barnes, Walton, N.Y. — Truck accident—inj. head, back	456.00
Richard J. Murphy, Hobart, N.Y. — Saw accident—cut fingers	123.45
Florence Anne Hill, Chaffee, N.Y. — Fell—broke arm	479.06
Nancy Gabel, Lawtons, N.Y. — Stepped on by cow—broke foot	188.56
Robert E. Gale, Bombay, N.Y. — Thrown from horse—back strain	115.71
Harry Hollenbeck, Johnstown, N.Y. — Caught in baler—inj. arm, hip	162.53
Claude Oaksford, Johnstown, N.Y. — Trampled by cow—cut knee	312.84
Edward A. LaPoint, Pavilion, N.Y. — Kicked by cow—broke leg	437.38
Donald E. Foster, Corfu, N.Y. — Caught in corn picker—broke finger	138.54
Evelyn Crawford, Herkimer, N.Y. — Fell down stairs—broke knee	572.76
Ross Eckert, West Winfield, N.Y. — Fell off lawn mower—inj. fingers	188.09
Allan St. Louis, Carthage, N.Y. — Jack hose broke—inj. finger	339.90
John H. Clark, Woodville, N.Y. — Wheel barrow fell—broke ankle	154.51
Michael Powlin, Lowville, N.Y. — Auto accident—whiplash inj.	348.56
Katie Lehman, Castorland, N.Y. — Knocked over by team—inj. thigh	295.68
Alfred W. Smith, Hubbardsville, N.Y. — Fell off truck—injured hand	101.61
Robert W. Przestrzelski, Ft. Plain, N.Y. — Truck Acc.—broke ribs	234.14
Walter VanBuren, Lockport, N.Y. — Caught in PTO—cuts	128.56
John F. Heber, Rome, N.Y. — Fell from ladder—inj. shoulder	197.13
Anna Nowack, Victor, N.Y. — Fell—broke arm	$382.28
Blanche Bruning, Middleport, N.Y. — Hit by wagon—inj. leg	173.55
Roland Frost, Hannibal, N.Y. — Vaporizer tipped over—burns	325.00
Floyd Townsend, Oneonta, N.Y. — Bailer dropped—broke leg	185.71
Arnold Taggart, Gouverneur, N.Y. — Fell over plows—broke elbow	207.84
Charles Darling, Canton, N.Y. — Bar fell—broke toe	128.75
Carolyn Fox, Canajoharie, N.Y. — Fell up stairs—injured leg	129.86
Thomas Livingston, Howes Cave, N.Y. — Thrown from tractor—broke arm	388.52
Andrew J. Ellison, Watkins Glen, N.Y. — Radiator hose blew—burned face	135.00
Joseph C. Schumacher, Hornell, N.Y. — Caught in beaters—inj. leg, chest	1235.72
Steven Learn, Cameron Mills, N.Y. — Thrown from truck—injured knee	264.50
Mary L. Donovan, Hornell, N.Y. — Caught in grain drill—cut hand	255.98
Henry Zimnoski, Mattituck, N.Y. — Thrown from truck—inj. knee	464.90
Jamesy Sue Ward, Candor, N.Y. — Pony jumped—broke leg	474.50
Alfred Dates, Ludlowville, N.Y. — Crushed by horse—broke shoulder	1183.66
Lawrence Howser, Groton, N.Y. — Fell from ladder—broke heel	471.36
Henry C. Sanzotta, Wolcott, N.Y. — Fell from Ladder—broke ribs	487.15
Sally Mallaber, Walworth, N.Y. — Thrown from horse—injured elbow	222.15
George VanGelder, Savannah, N.Y. — Caught in machine—broke finger	257.27
Alex Dominick, North Java, N.Y. — Chain saw slipped—cut foot	201.57
Ronald D. Bennett, Nelson, Pa. — Kicked by cow—sprained ankle	160.70
Raymond Egli, Jr., Roaring Bench, Pa. — Thrown off wagon—inj. back	226.60
Elizabeth A. Gaber, Waterford, Pa. — Cut by window—injured hand	606.75
James W. Leet, Coudersport, Pa. — Cleaning corn chopper—cut fingers	160.80
Guy Vandermark, Montrose, Pa. — Fell from wagon—inj. knee	715.65
Howell Wentzell, Elmer, N.J. — Hit by shot gun—injured legs	557.16
Joseph Carchesio, Jr., Englishtown, N.J. — Auto accident—broke leg	322.64
Donald H. Stiles, Suffield, Conn. — Caught in auger—injured fingers	136.00
George Devoid, Salisbury, Vt. — Tractor accident—inj. thigh	101.38
Claude Briere, Jeffersonville, Vt. — Fell—broke wrist	632.32

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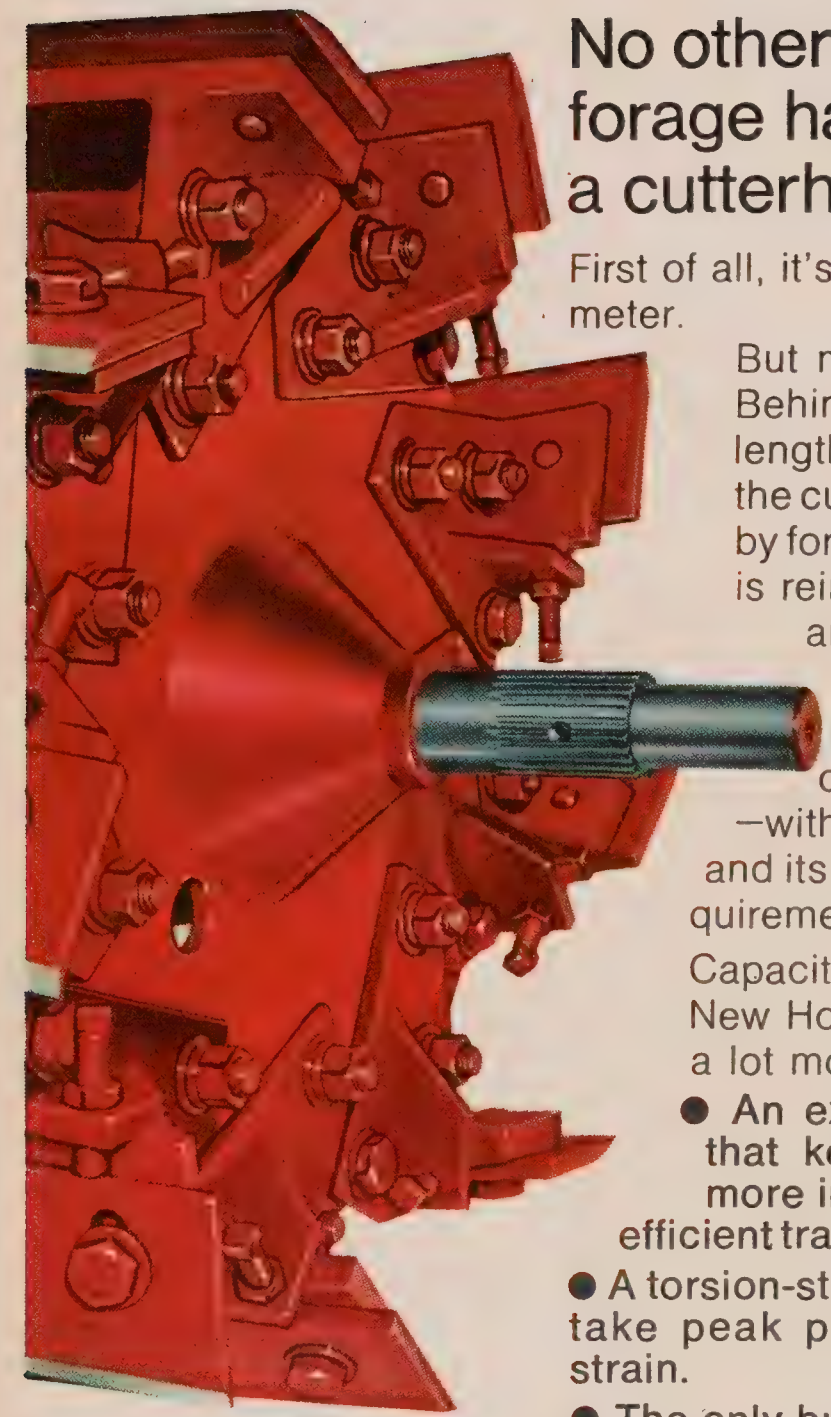

Note the exclusive steel cone that gives extra support where shaft joins side plate.

No other like-size forage harvester has a cutterhead like it.

First of all, it's big: 24 inches in diameter.

But most of all, it's strong. Behind each knife is a full-length steel plate, protecting the cutterhead from damage by foreign objects. The shaft is reinforced for longer life, and rides on sealed ball bearings.

With nine knives you'll chop to a uniform 3/16" —without a recutter screen and its costly horse-power requirements.

Capacity comes first, but this New Holland Super 717 gives a lot more:

- An exclusive 98° gearbox that keeps universal joints more in line to provide more efficient transfer of tractor power.
- A torsion-steel PTO shaft that can take peak power loads without strain.
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It adds up to a hard-working machine. Whether you're chopping corn silage (with a 1-row, 2-row or 2-row narrow head) or haylage (with the Super-Sweep windrow pickup) or standing grass crops (with the all-new sicklebar attachment).

That's what you'll have going for you just as soon as you get going—to your nearby New Holland dealer's.

New Holland Division of Sperry Rand.

Super 717 Forage Harvester: All corn heads have spring-loaded idlers that make it easy to keep gathering chains tight.

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For The Northeast Farmer

AUGUST 1969

American Agriculturist
and the
RURAL NEW YORKER

EMPIRE FARM DAYS
August 5, 6, 7
Greigsville, New York

NEW YORK STATE FAIR
August 26 – September 1
Syracuse, New York

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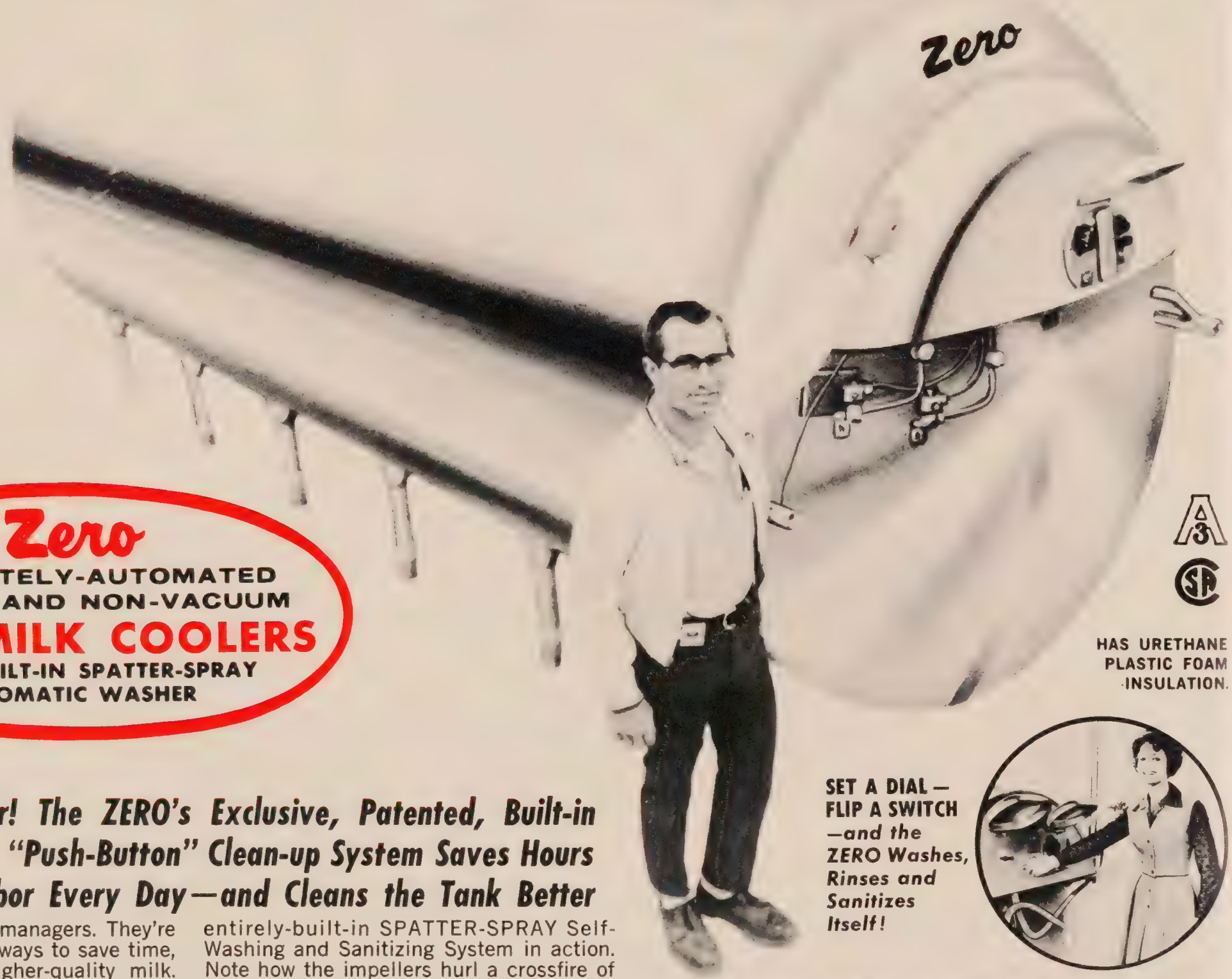

Zero
COMPLETELY-AUTOMATED VACUUM AND NON-VACUUM
BULK MILK COOLERS
—with BUILT-IN SPATTER-SPRAY AUTOMATIC WASHER

HAS URETHANE PLASTIC FOAM INSULATION.

SET A DIAL — FLIP A SWITCH —*and the ZERO Washes, Rinses and Sanitizes Itself!*

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Big dairymen are good managers. They're constantly seeking new ways to save time, labor — and produce higher-quality milk. That's why more and more big dairymen are installing ZERO COMPLETELY-AUTOMATED BULK MILK COOLERS.

The ZERO—both vacuum and non-vacuum models — is the greatest time and labor-saving farm bulk milk tank ever made. It greatly reduces milk-handling costs — and helps produce higher-quality milk — for bigger profit.

ZERO's Patented, Entirely-Built-in SPATTER-SPRAY Self-Cleaning and Sanitizing System — and Round Design — Make this Possible. Clean-up is easy. Here's all you do after the tank is emptied. Fill the detergent jar. Set the Automatic Timer Clock. Flip the Switch. And the ZERO washes, rinses and sanitizes itself — as "push-button" automatic as the home automatic laundry washer. Saves hours of clean-up and sanitizing time each day for other chores.

The ZERO is the Only Farm Bulk Milk Tank with a Completely-Automated, Entirely-Built-in Self-Cleaning and Sanitizing System. Everything — including all Controls — and even the detergent jar — is built-in. There's no time-wasting, labor-wasting conglomeration of a makeshift sprinkler and gadgets to connect, insert into the tank, remove, disconnect, wash and store away every clean-up.

Cleans Better — Bacteria Averages Reduced. Photo at right shows the ZERO's entirely-built-in SPATTER-SPRAY Self-Washing and Sanitizing System in action. Note how the impellers hurl a crossfire of detergent solution — with "tornado" force — against the ZERO's stainless steel sides, ends and sealed-tight lids. Round-shaped — there are no hard-to-reach corners. Official records show bacteria averages have been greatly reduced.

Entire Electrical System Also Built-in — for Safety. This prevents possible hazards that might be caused by a wet floor, wet shoes and damp equipment. The ZERO is the only farm bulk milk tank with a safe, electrical cleaning system.

It's Possible to Install a Larger-Capacity ZERO Without Enlarging Your Milk House. The big ZERO is designed with larger diameters than standard model bulk tanks. Because of this, in many cases, a larger-capacity tank will fit into the same size milk house as a smaller, standard size model. Also available is a bulkhead tank.

Costs Less than You'd Expect. Even with this exclusive, entirely-built-in, automated SPATTER-SPRAY Self-Cleaning System — savings due to compact design and volume production enable the ZERO to be offered at prices comparable to lower-quality, less efficient bulk tanks.

See Your ZERO Dealer! Mail Coupon today for full information, including specifications and capacity sizes — location of your nearest ZERO installation — and name of nearest ZERO Dealer!

ZERO MANUFACTURING CO. 691-U Duncan Ave. Washington, Mo. 63090

This photo shows ZERO's patented, entirely-built-in SPATTER-SPRAY Self-Cleaning and Sanitizing System in action. The big 4,000-gallon ZERO above has three impellers that hurl a triple cross-fire of detergent solution against the tank's entire stainless steel interior for thorough cleaning and sanitizing.

FREE! 14-PAGE ILLUSTRATED BOOK — describes in detail everything you should know before you invest in any milk handling equipment. Explains how modern ZERO AUTOMATION saves time, labor and increases milk profits. Gives full information about ZERO COMPLETELY-AUTOMATED BULK MILK COOLERS — including dimensions of different capacity models. Mail coupon for FREE BOOK today!

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ZERO MFG. CO.; 691-U **Duncan Ave.; Washington, Mo. 63090**

Please send me FREE Book described above — location of nearest ZERO installation — and name of my nearest ZERO Dealer. I am interested in:

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- ☐ New ZERO CONCORD Twin-Vacuum Complete Pipeline Milking System
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NAME .....

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SIZE OF MILK HOUSE ..... SIZE HERD .....

MAKE OF PRESENT MILKING MACHINE ..... AGE....

ADDRESS ..... PHONE .....

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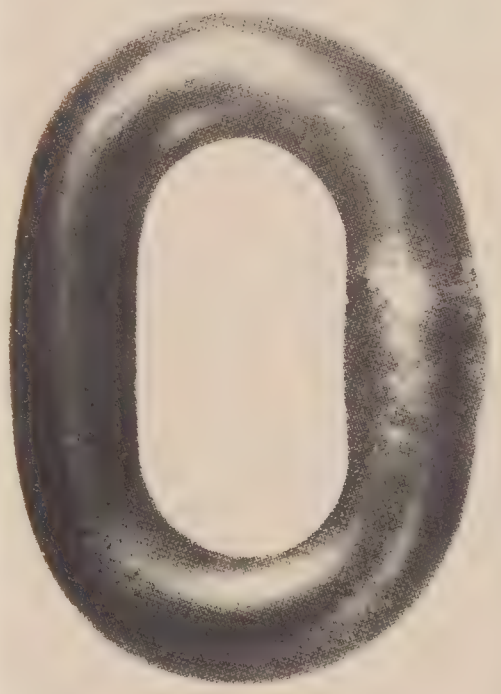
See ZERO Equipment on Exhibit at the New York State Fair!

IN THE CORNELL BARN CLEANER THE LINK *IS THE THING*



No one makes a barn cleaner like Cornell, and no one makes a link, like the one in the Cornell Barn Cleaner. This Is Its Heart because it is designed and made for 3 specific purposes: Efficiency, Economy and Dependability.

The round, short, welded link (not riveted) prevents jamming, and breakage—sheds urine and manure better to prevent corrosion. The Cornell link, together with the non-slip double tooth drive sprocket; two inch drive paddle; exclusive reverse corner idlers, and its fully automatic operation give you, the user, the best barn cleaner on the market.

It would pay you to know more about the Cornell Barn Cleaner. It would pay you to have one . . . Write today for more information.

☐ Cornell Barn Cleaner ☐ Cornell Conversion Kit ☐ Vandale Silo Unloaders
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For The Northeast Farmer

American Agriculturist and the RURAL NEW YORKER

Vol. 166, No. 8

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OUR COVER

When it comes to the attraction of new equipment, every man remains forever a little boy! Father and son alike can see all the latest machines at the Empire Farm Days near Greigsville (where State routes 63 and 36 cross in Livingston County), New York, on August 5-7 . . . or at the New York State Fair, Syracuse, from August 26 to September 1. They're both great shows!

Strong, white RIGID·RIB® protects new AGWAY Research Barn

AGWAY'S Dairy Feed Research Barn at Tully, New York, is packed with special equipment to weigh feed in and out for each of the 60 Holstein cows under study. Constant tests measure body weight, productivity, butterfat content, etc., with different rations and supplements.

The controlled environment inside the barn includes full insulation, ventilation, and liquid manure disposal. To protect this substantial investment in equipment and livestock, and to help keep the interior cool, long-length sheets of Republic prepainted white RIGID•RIB® galvanized steel roofing were used.

Twenty-eight-foot lengths of RIGID•RIB easily covered the roof, with one sheet, eave to ridge, on each side. Its 2½-foot covering width reduced the number of side laps, too.

The distinctive configuration of RIGID•RIB gives it extra strength and gives buildings a crisp, clean appearance. A RIGID•RIB roof will carry heavy snow loads and hold tight in high winds, even over wide-spaced purlins.

When you build, ask your AGWAY man or your Republic farm products dealer about RIGID•RIB galvanized steel siding and roofing. Available in galvanized or prepainted in Turquoise, White or four new colors: Desert Sand, Seafoam Green, Canyon Red, Gulf Blue.

RIGID•RIB: the wide, long, dry, strong building sheet.

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EDITORIALS

by GORDON CONKLIN

GRAPE BOYCOTT

A mass of information is available about the California grape boycott . . . and most of it is contradicted by the next report received.

The Catholic Archbishop of San Francisco publicly has rejected any support of the boycott . . . but parochial school children in some areas compose insulting letters to grape growers as exercises in English. Senator Kennedy and some other politicians joined a "march" on behalf of union leader Cesar Chavez . . . and other political leaders joined in opposition. Representative B. F. Sisk, a liberal Democrat with a voting record labeled by the AFL-CIO as "95 percent good," concludes that "grape growers resent the abuse and vilification which has been heaped upon them by labor leaders, public officials, college activists and a host of other citizenry who seem unwilling to take the time to find out just exactly what the implications of the boycott are."

In this highly emotional power play, several things seem to emerge:

1. The United Farm Workers Organizing Committee is attempting to have the grape workers delivered to them by their employers. Little support for the union exists among grape workers.

2. Thousands of small farmers produce table grapes in California, and employ no labor. They too are crunched by the boycott . . . even though not legally or morally a part of the dispute.

3. The challenge to farmers is clear . . . today, table grapes . . . tomorrow milk, beef, eggs, or anything else. Trying to prevent consumers from purchasing table grapes has led to violence and intimidation.

We need a national agricultural collective bargaining law that will work out an acceptable compromise between farmers and workers . . . at the same time as it protects the consumer's right to be unmolested in the marketplace.

COMMON PROBLEMS

How goeth things in Merrie England as far as farmers are concerned . . . or, more accurately, in Great Britain?

A recent letter from British journalist Frank L. DeBaughn excerpts as follows:

"Not for many years has Britain's farming scene been so stormy as it is today. With their hopes of government-inspired action to help them expand production on all sides, dashed by the terms of the annual Price Review, numbers of farmers are seriously contemplating getting out altogether.

"What's it all about? For, after all, anyone in agriculture abroad who follows events in British farming must be aware that, under the annual Price Review, government help is forthcoming to help improve returns from most commodities. . . .

"But there is more fire in criticism of the annual Review than the usual complaint that it does not go far enough in meeting extra farm costs. This year there was the general expectation among Britain's farmers that, over and above recouping them for higher costs, the Review would add an extra element . . . an injection of fresh capital into the industry designed to help farmers expand production and offer more food to buyers on the home markets, thus easing the balance of payments problem.

"Men in dairying, who are in the farming majority in Britain, go further. They blame the government for action in cutting milk sales at home through reducing the amount of what is known as 'welfare' milk, supplied to the schools.

"So many of the farm workers these days are contrasting their earnings with those of workers in general industry who are, over the country as a whole, taking home something like one-quarter to one-third more cash."

Some of it sounds familiar, doesn't it?

RICH FERTILIZER

Across my desk recently came a promotional blurb for a fertilizer especially designed for ornamental plants and gardens. After looking closely at the fine print, I decided it was really designed for separating the suburbanite from his paycheck!

The analysis, it turned out, is 1½–½–1 . . . meaning three pounds of plant food per 100 pounds. And the price of the product is $1.25 per pound . . . or a "great bargain" of four pounds for $4.75!

On a per-ton basis, even the bargain-basement price would amount to $2375! And this price for a measly 60 pounds of plant food . . . or nearly $40 per pound of "real goods."

Of course, there was the usual hocus-pocus about mystical powers conferred on soils by the material . . . with words like "microbial" and "organic" strategically mentioned here and there to enrich the aura of magic.

Cost per pound of plant nutrient remains the best single measuring stick for a fertilizer . . . with special soil or crop circumstances occasionally requiring the supplementation of that yardstick.

As the blurb says, "A little goes a long way." At $40 a pound, **darn** little would go a long way with me!

WRONG MAN

It's long been one of the truisms of life that the price of whiskey can jump a dollar a quart without creating a tremor among the buying public . . . but a jump of a cent a quart in the retail price of milk will bring down the roof!

The Consumers Union recently reported hopefully; "Consumers may soon be paying lower prices for whole milk as a result of the vigorous recent introduction of milk substitutes." The report concluded; "Imitation milk is banned in only four states, and if nothing else it is helping to topple the propped-up price structure now hampering competition in the sale of whole and filled milk."

Food requires only 17 percent of the disposable income of our nation . . . the lowest of any nation on earth, and the lowest in the history of the U.S. Living costs **have** increased sharply, but not because of increased returns to farmers! On the average, farmers receive only 38 percent of the retail food bill . . . and there is a mass of information to show that increased retail food prices have not generally resulted from increased farm prices.

The real kicker pushing living costs upward has been the soaring prices of services . . . particularly medical expenses. Wage increases have risen at an astounding rate of late . . . pushing farm production costs up along with the general cost of living.

Doctors, plumbers, electricians, teachers, and a host of others providing services to the consuming public . . . as well as industrial workers . . . have recently enjoyed rapid increases in incomes. Sharp price increases, as well as escalating taxes, have been made inevitable by that fact.

Consumers Union picked on the wrong group . . . even as does many a housewife, sad to say, when she tries to make the family budget stretch!

HATCHET MEN

I suppose one of the oldest impulses in man is the notion that the quickest way to build yourself up is to tear down the other guy. The Good Book, you'll remember, took note of this fact in the Ninth Commandment. How sweetly to our lips come those reports . . . factual or otherwise . . . about the failings of our neighbors!

One of the latest instances of such chopping activities among farm organizations is the wild charge by the National Farmers Organization that the Farm Bureau is entirely "to blame" for the soybean price support being set by Secretary of Agriculture Hardin at $2.25 . . . instead of some higher figure. NFO further charges that FB has a "phantom membership" . . . and its editorial pages rail on about what dirty birds the FB'ers are, and how enormously effective NFO has been in all instances on behalf of farmers. It follows the typical pattern of taking credit for all price advances, and blaming all lowered prices on someone else.

In a society where minority militance seems to be the way to get ahead, the NFO approach to collective bargaining may prove to be the wave of the future. But real progress in farmer bargaining power is not made by shrilly screaming accusations at other farm organizations . . . however satisfying such a process may be to the egos of the leadership throwing the brickbats.

Emotions are the stuff of which new movements are born . . . including farm organizations . . . but a responsible appraisal of facts is the solid foundation upon which they endure.

PERMANENT

According to information I have, a "temporary" six-percent sales tax in Pennsylvania . . . once supposed to revert to five percent on July 1 of this year . . . has been made permanent. This is only one more notation in an endless list of similar transformations of "temporary" to endless. That list involves all states, not just Pennsylvania.

It's psychologically sound to promote a new tax as just an "emergency" deal . . . but taxpayers should consider its merits in terms of it soon becoming a permanent levy.

This exclusive spinning power corner feeds leaning and tangled stalks into the throat—prevents stalks from hair-pinning and hanging up on the side or in the corner.

Stalk gripper

John Deere gathering belts save stalks and prevent plugging

Gathering chains are gone from John Deere Forage Harvesters. Instead, rubber gathering belts firmly grip and carry each stalk to the feed rolls. Once the wide belts grasp them, stalks can't get away.

There's no chance for corn or sorghum stalks to hesitate, bunch up, and plug. These exclusive belts whisk a steady, uniform flow to the cutterhead. They are much simpler and far quieter than chain gathering systems.

Belt your silage-making troubles this year—chop with an economical 34 or heavy-duty 38 Forage Harvester. Ask your John Deere dealer for details. You'll see why these unique row-crop units let you forget plugging stops and lost feed. Then look into his practical Credit Plan—it's as modern to financing as gathering belts are to silo-filling.

JOHN DEERE

Moline, Illinois 61265

Watch the 34 and 38 chop hay and corn... see the complete line of John Deere Tractors at Empire Farm Days.

Henry Telgheder, a co-owner of Tice Farms, credits modern insecticides and herbicides for producing peaches like these. "Consumers won't buy anything but the best," he says.

Dick Tice (left) calls this grading and packing room his "office," since he spends much of his time here. His father, Frank, is on the right.

URBAN ROADSIDE STAND

by Bob Rice

ON A clear day Dick Tice can see the Empire State Building. So can many of his neighbors in the heavily-populated suburban community of Woodcliff Lake, New Jersey. But, unlike his neighbors, most of whom commute daily to New York City, Dick works at home . . . on a 250-acre fruit and vegetable farm and its large fresh produce roadside store.

Only about 20 miles from Manhattan Island, Tice Farms is surrounded by homes, shopping centers, small businesses and expressways. Confronted over many years with the problems of high property taxes and skyrocketing real estate values, the farm not only is surviving, but is prospering. Its story is a lesson in adaptation to one's environment. It also should offer a message of hope to farmers anywhere who are feeling an urban squeeze.

Tice Farms began before the war . . . the War of 1812, that is. In 1808, Dick Tice's great-grandfather began selling garden produce beside the small dirt road that ran by his farm. "It all started with an overturned box under a shade tree by the road," Dick said. "The farm and business have been in our family since that time."

Today, Tice Farms is run by five men . . . Dick, his father Frank, his uncle Roy, Henry Telgheder, and Harold Mahoney. If the business is truly "a roadside stand," as Dick calls it, it must be one of the largest in the country, for it stretches for almost a city block along Chestnut Ridge Road, a busy, black-topped highway. Actually, it is several businesses under one roof. In addition to the fresh produce market, there is a bakery shop, meat shop, delicatessen, flower shop, and liquor store. Across the road is a restaurant owned by Tice Farms. The liquor store is under separate management, and the restaurant is leased out.

Backbone

The backbone of the business, however, the calling card that brings in thousands of customers a year, still is the fresh produce grown on the farm.

Tice Farms grows practically every fruit and vegetable that can be grown in New Jersey. Major fruit crops are peaches, apples, grapes, pears, nectarines, and plums. Major vegetables are tomatoes, sweet corn, cabbage, squash, broccoli, cucumbers, eggplants, peppers, and pumpkins. Most produce grown on the farm is sold through the roadside market, although some is sold wholesale to nearby supermarkets.

A person familiar with both farming and the problem of urbanization must inevitably ask the question, "How can Tice Farms continue to compete with alternative uses of the land?" Dick points out three answers: (1) New Jersey's property tax laws; (2) improved quality and increased quantity of produce raised on the farm; and (3) response to the needs and desires of customers.

Tax Law

Dick explained that three years ago New Jersey legislators, in an effort to keep agriculture possible in the State, passed a Farm Land Assessment Act, and under this law farmers with five acres or more pay land taxes based on the agricultural value of the land rather than on the actual real estate value.

"This law is the only thing that saves us," Dick said. "Without it our taxes would be many times what they are now.

"Everyone concerned profits from the law," he continued. "without farms all food would have to be shipped in and would cost more. New Jersey, by tradition, is called the Garden State. I hope it stays that way."

Top Quality and Yields

With no new land available for expansion, and with competition from nearby supermarkets, Tice Farms is presented with a tough challenge . . . produce more food of better quality from less land.

Tice and his associates are meeting this challenge through improved agricultural technology. "We've lost some land over the years," Dick said, "yet our production has remained about the same, and in some cases has gone up. Tomatoes are an example. We now grow a lot more per acre than we used to, and the quality is better than ever.

"Every square foot of farm counts," he continued. "We even do quite a bit of double-cropping by planting tomatoes and pumpkins around the base of young fruit trees to save space.

"We have to keep a constant eye on Mother Nature," Dick said, "and be ready to handle any problems that insects or the weather may bring our way. Sometimes we have to irrigate every inch of the farm. Fortunately, we have a good well that lets us do that."

Agricultural Chemicals

Agricultural chemicals play a key role in the farm's operation, according to Henry Telgheder, one of the co-owners. He credits herbicides such as Atrazine and Treflan for increasing yields on the farm, and insecticides such as Sevin for producing top-quality crops. "Consumers have more money these days," Henry continued, "They won't buy anything but the best, and they are willing to pay a little more for top-quality produce."

Dick backed up his statement. "We can't always compete with the chain supermarkets in price," he said, "but we can beat them in quality. It's quality and freshness that bring the customers to a roadside operation."

"There was a time," added Dick, "when a person was afraid to bite into a peach because of worms. Now you won't find a worm in a whole carload of peaches."

Pesticide drift and residue problems, which must be taken into account by farmers everywhere today, are doubly important at Tice Farms. "In an area as heavily populated at this, you must be careful about what chemicals you use," Dick said. "We use Sevin insecticide because we just can't afford drift and residue problems. Also, it does a good job of controlling a lot of different insects, including earworms and corn borers, and is safer to handle."

Tice Farms has been using Sevin since it was introduced several years ago both for insect control and for thinning apples. Glyodin fungicide is used on apples and peaches to control fungus diseases and improve fruit color and finish. Fruit spray programs usually are those recommended by the College specialists.

Stretch The Season

In order to stretch their season and offer fresh produce over a longer period, Tice Farms maintains orchards with many different varieties of fruit. In addition, they experiment with new varieties as they are introduced. Fertilizer for both fruit and vegetable crops is applied as soil needs dictate.

Puerto Rican migrant workers supply most of the necessary farm labor. Tice Farms provides housing for about 40 men, and usually must advance transportation money to natives of Puerto Rico to bring them to the States. The nearness of New York City poses a labor problem for the farm, because workers often are tempted to move to the city before they have worked out the transportation loan. "This," according to Dick, "is just one of the problems we must take into account."

Respond to Customers' Needs

A farmer in a heavily-populated area can look at his increasing number of neighbors in one of two ways . . . as a threat to his existence, or as an opportunity for increased sales. Tice Farms has chosen the second and more positive attitude.

"We are going in the opposite direction of agriculture in general," Dick said. "Whereas most farmers are becoming more specialized and concentrating on growing fewer crops, we are becoming more diversified. We hope to be able to remain in the wholesale production of fruits and vegetables; however, we know our big area for growth is in our retail roadside market.

"We try to handle whatever people want to buy," he continued. "That's why we've added the other shops over the years. People come out here from the city, from Long Island and Westchester County, because they know our fresh produce is top quality. While they are here,

(Continued on page 20)

A Case man has a special way to make money with beans

He babies 'em—with a Case 660 Bean Special. This is the combine that's made-for-beans from its gentle, knee-action draper to its straight-thru unloading auger—*but without the custom price.*

40-inch cylinder—33 to 53% wider than comparably priced machines. Plenty of elbow room for bushy, tangled beans to thresh clean and whole!

Micrometer-precision concave adjustment—on-the-go—keeps cracks and splits to a minimum. Concave is precision-milled for more exact threshing clearance.

20-finger auger speeds crop in a controlled, even flow to the feed rake. Header throwout allows digesting bunched windrows.

40-inch-wide feeder—to spread out big windrows the full width of the cylinder. Spring-loaded, sprocketless, lower feed drum.

40-inch-wide separation—4480 square inches of it. 2830 inches of no-guesswork cleaning.

Special 8-inch, sump-type elevator with heavy roller chain, top drive and bucket flights fills the bin fast but gently.

Straight-line unloading—no elbows to crack beans. Close tolerance of 8″ auger eliminates wedging. Optional belt unloader cushions beans from bin to truck.

Other bean features: deep-sump stone trap—skid shoes or gauge wheels (optional)—rubber beater padding—rubber-faced concave filler bars (optional)—canvas check flaps behind beater.

In a class by itself! See the 660 Bean Special at your Case dealer. Convenient lease plan or financing through Case Credit Corporation. J. I. Case Company, Racine, Wisconsin.

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Doc Mettler Comments On:

PINK EYE

People spend much time and effort, some for fun and some seriously, trying to predict what a winter month will be like. I've never heard much talk, however, about predicting what the month of August will be like. Perhaps this is because August varies more than any month of the year. As a veterinarian interested in cattle practice, if I could predict the weather I could tell you what to expect in the way of disease during August.

If you think back a little you could make a guess, too. Regardless of weather certain things will happen, but if the weather is hot, windy and dry you can expect pink eye to hit quite a few herds. If there is an early frost after wet weather you can expect bloat.

Pink eye, or infectious bovine keratitis, is said to be caused by a certain bacteria, with perhaps a virus as a primary agent. In recent years we have realized that much of what we called pink eye in the past was actually the after effects of I.B.R. virus. The kind that comes in the summer, however, is more apt to be a primary eye disease and seems to be spread by flies and dust blown from herd to herd, sometimes miles away. The bacterial agent can be vaccinated against before a herd has an outbreak. However, in our practice we have had some rather severe reactions to the bacterin and avoid it wherever possible.

First Symptom

The first symptom of pink eye is a watery running eye, not too much different than an eye irritated by face flies. The next day the inner eyelid will be swollen and the white part of the eye appears red . . . thus the name "pink eye." The typical reaction to this by an owner is that the affected animal was hit in the eye with a switch or rope. Within a few days more animals will become affected, and then there is no doubt as to the source of the trouble.

You will hear about a lot of "heroic" treatment for pink eye, like sticking a needle into the edge of the eye and injecting various compounds. However, have a little compassion for the poor animal . . . those eyes hurt! Use the simplest treatment available and, most important, if at all possible get them in a darkened place away from flies and the bright sunlight.

If in doubt as to diagnosis and treatment, call your veterinarian: He may tell you on the phone after hearing you describe the disease, "Well, every farm in the area has it so I suppose you have pink eye, too. Stop in and I'll have some medicine for you to use."

Treatment

Most of the medicines used are antibiotics or mixtures of antibiotics with a local anesthetic for pain. Some contain dyes to color the eye dark blue and help keep the light out. There are sprays in aerosol-type cans that are mostly dye. These are used in beef cattle where keeping out of the sun is impossible. On dairy cattle I prefer the non-aerosol-type sprays, since the aerosols do frighten and hurt an animal. Recently a spray of a furacin-type product has come on the market and is approved for use. Your veterinarian can supply this and probably will if he feels it is working in your particular area.

Intermuscular injection of certain antibiotic mixtures sometimes help, but mean holding milk out on milking animals. If the cow seems to be affected systemically and is feverish, the intermuscular treatment is a must.

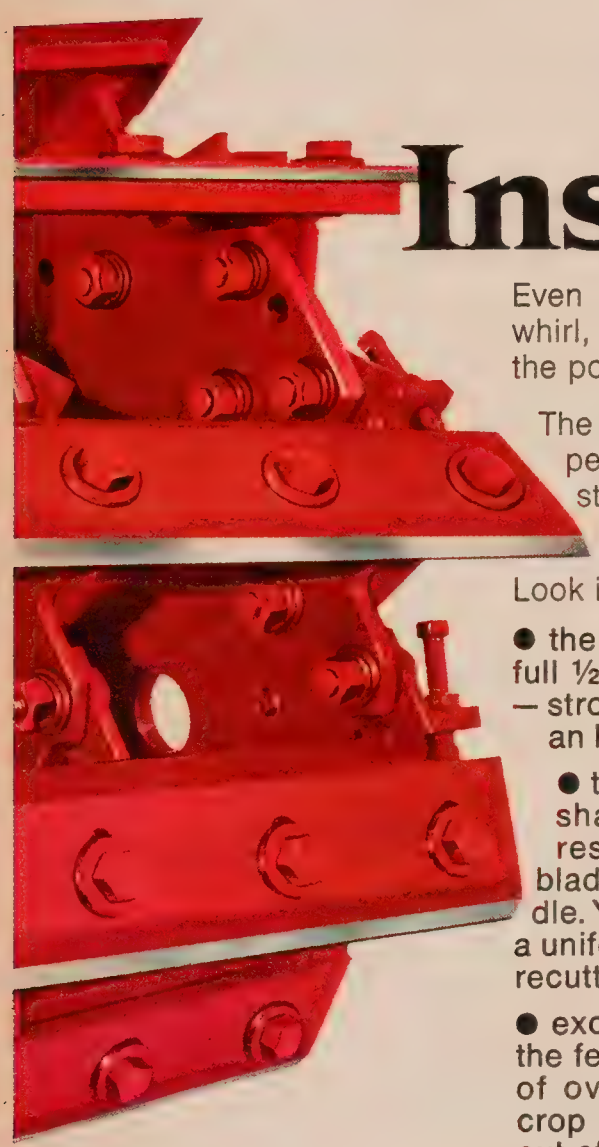
About Bloat

But suppose it turns cold in August and you have to be concerned about bloat! If you have had bloat cases in the past call your veterinarian and have him put up some emergency bloat treatment before pasturing on recently frozen (or even recently wet and cold) alfalfa or clover. Severe foamy bloat cases are either dead or better by the time you can get help from your veterinarian, so have the medicine on hand.

Prevent bloat by feeding cattle some dry coarse hay before turning into pasture that is apt to

(Continued on next page)

When we say heavy-duty, we mean heavy-duty.



Inside

Even before you give the New Holland Model 880 a whirl, you'll have that great "this is it" feeling: this is the powerhouse chopper that's made for rough going.

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- the mighty cylinder cutterhead has side plates a full ½" thick, plus a center plate for added support — strong enough to pour out 65 tons of corn silage an hour.
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- exclusive planetary gearbox lets you reverse the feed rolls instantly. In case of overload, heavy slugs of crop can be "inched" into or out of the rolls.

and out.

And if you want all this in a self-propelled model, New Holland has that, too: the Model 1880 Crop-Cruiser® forage harvester (available with a 12-foot sicklebar).

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cause bloat. In fact, a few bales spread around the lot will often be eaten by the cattle. They seem to sense that they need the dry coarse roughage. Keep an eye on cattle, particularly the first day or two on new legume pasture, and if necessary remove them after an hour or two. If they do start to bloat run them out where they can be fed some dry hay.

You may see advertisements for salt blocks containing anti-bloat remedies. These apparently do work, but don't ever turn out cattle without some concern at this time. Ladino clover is the worst of the clovers for bloat, so if you are pasturing ladino don't depend on anything but watching the cattle till they get used to it. If the cattle are hungry and have been without feed for two or more hours be particularly careful.

Turpentine, two tablespoonsful mixed in a pint of milk, can be used as an emergency drench for bloat, but can cause animals to go off feed for a day after treatment. Trocarization on the left side which will relieve bloat in a choking animal will be of little help on a foamy bloat. Your veterinarian may slash a cow open on the left side as a last resort, and then suture her up again, but when they get this bad more die than are saved.

So let's hope it is neither cold and wet enough for bloat nor hot and dry enough to spread pink eye organisms this August, but just perfect summer weather.

WHEAT MAKES MILK

The old fallacy that high-wheat is bad for milk cows has been proved false by a team of Washington State University dairy scientists.

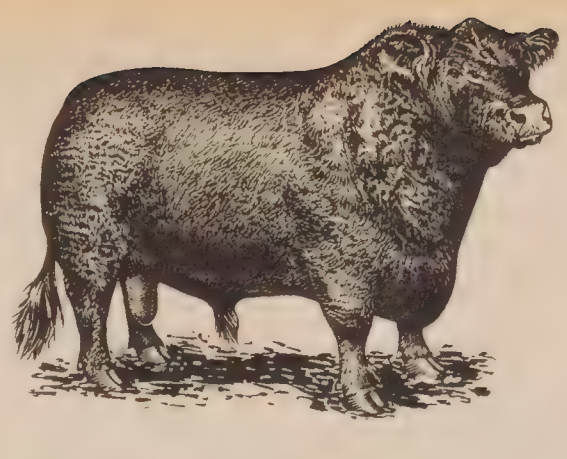
The WSU researchers have come up with results disproving the long-held belief that high levels of wheat will throw dairy cows off feed, produce digestive disturbances, and lower milk production.

In the study, high-producing cows showed none of these adverse effects when fed high levels of wheat ranging up to 93 per cent of the pelleted grain ration. Other levels fed: 83, 73, 63, 53, and 20 per cent of the grain ration.

High-producing Holsteins in the WSU test ate as much as 34 to 38 pounds daily of the high-wheat rations without any digestive disturbances. The amount consumed is about double the usual 15 to 20 pounds daily by the high-producing dairy cows.

Nutrient uptake by the cows, total milk production and composition of the milk were about the same for all six different levels of wheat fed. Body weight gains also were similar for each ration.

The experimental rations included steam-rolled, pelleted soft white wheat, and barley fed with alfalfa hay. Gaines wheat, grown extensively in the Pacific Northwest, was used in the study.



BEEF BULLS FOR HEIFERS?

Breeding dairy heifers to beef bulls may reduce calving difficulties, but it presents herd replacement problems.

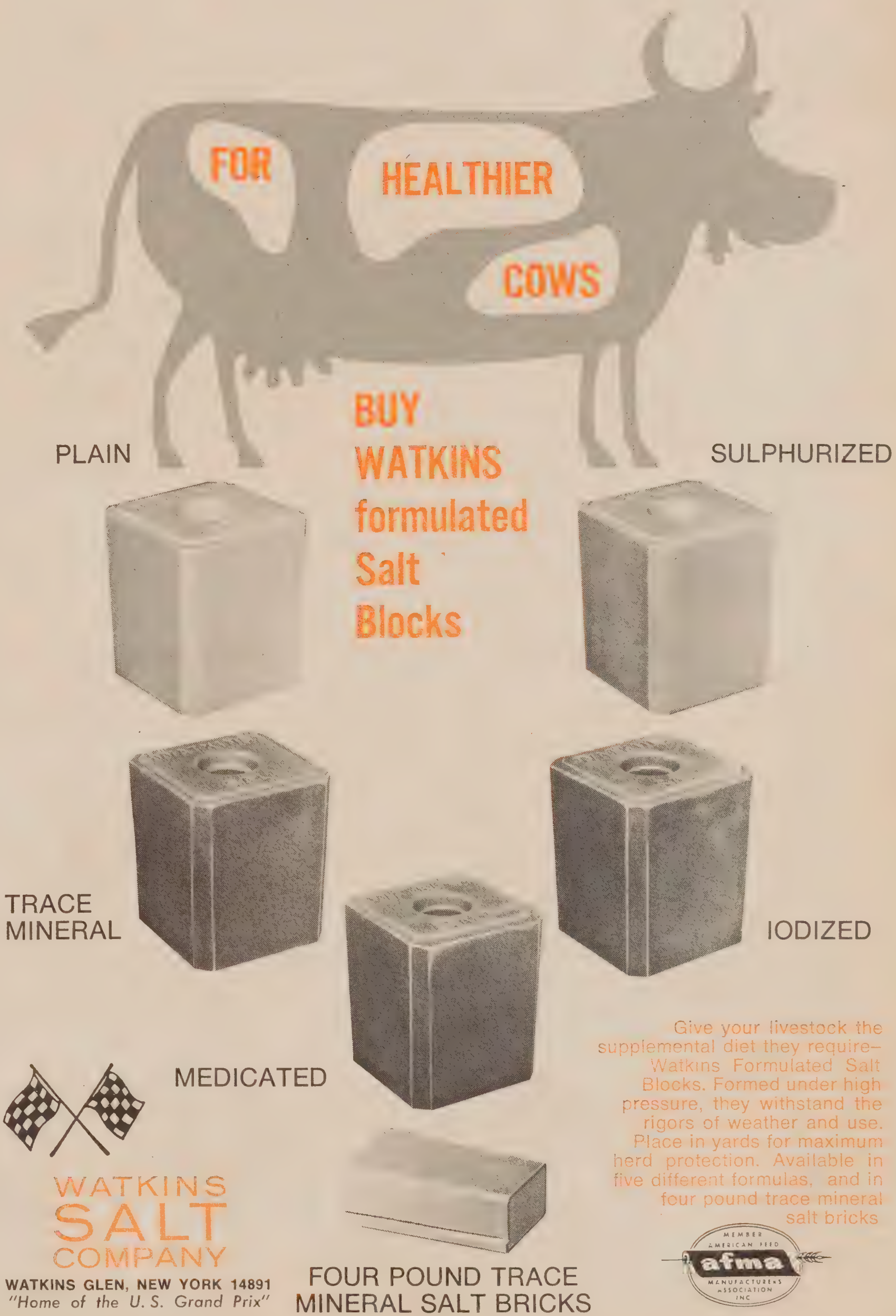
Dairymen can profit more by mating their cows to a good bull of the same breed, says Wisconsin dairy specialist A. G. Sendelbach.

According to Sendelbach, research work indicates that calves from Angus bulls were somewhat smaller at birth than calves from Holstein bulls. However, researchers conclude that the sacrifice of good dairy replacements was too high a price to pay for the lowered incidence of calving difficulties obtained by mating to beef bulls.

The dairy specialist points out that the average Wisconsin cow produces only three calves in her lifetime. If the heifer is bred to a beef bull, the first calf is outrightly eliminated as a herd replacement. This leaves two calves, one of which on the average will be a bull.

"Therefore," Sendelbach says, "a program where heifers are mated to beef bulls results in a situation where the average cow is able to produce only one heifer calf in her lifetime."

He adds that it may be desirable to breed heifers to dairy bulls known to sire smaller calves. Also, he suggests that the calf feeding and management program should be such that heifers are well grown at the time they are bred for the first time. The size of the heifer may be more important than her age in determining the best time to breed.



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FORWARD

TUESDAY AUG. 26 THRU LABOR DAY
SYRACUSE N.Y.

more fun

highlights

1. Musical Museum
2. Children's Center
3. Horticulture Center
4. Grandstand
5. Art and Home Center
6. Press Building
7. All-Foods Center
8. Midway and Funland
9. Center of Living
10. Rocket Belt Demonstration
11. Free Entertainment Center
12. Dairy Center
13. "Hall of Health"
14. Poultry
15. Witter Agricultural Museum
16. Swine
17. Sheep
18. Farm Machinery and Home Equipment Show
19. Beef Cattle
20. Junior Dairy Barn
21. Junior Pavilions
22. Wildlife Exhibits & Aquarium
23. Dairy Cattle
24. Coliseum & Horse Show
25. Horse Department
26. Youth Center
27. Microd Track
28. State Exhibits Center
29. Indian Village
30. Del Nero Model Home
31. Fish and Game Conservation Shows
32. Heliport
33. Museum Storage Building

free at entertainment center:

Victor Borge ★ Anita Bryant ★ Frank Sinatra Jr.
George Kirby ★ LeRoy Van Dyke ★ The Golddiggers
Bill Anderson ★ Frank Yankovic Polka Band
Big Tiny Little Dixieland Band ★ Lou Prohut and the Prohut Family Dancers
Larry Griswold ★ Jack Durant ★ Glenn Haywood ★ Sabu Elephant
Rufe Davis ★ Crazy Elmer ★ Country and Western Show

free at the grandstand:

High School Bands Championship
Eldon Daniels and Auto Thrillcapades
Harness Horse Races ★ Historic Auto Show and Parade
Horse Pulling Championship ★ Tractor Pulling Championship

also at the grandstand

Labor Day
NYS Stock Car Championship Races

free at the coliseum:

Square Dance Contest
International Horse Show
Judging—Dairy Cattle Show
Parade of Champions

Schedule of Events

(All buildings and exhibits are open until 10:00 p.m.)

A.M.

8:00 Judging Swine-Market Barrows
Pigeons, Rabbits and Cavies
Forage and Grain
4-H Dairy Cattle Judging Finals
Livestock Contest Finals
Homemaking Exhibits
Wether Show

8:30 Horse Show:
Pinto Halter
Shetland Halter
Appaloosa Pleasure Stake
Medal Stock Seat A.H.S.A.
Stock Horse Stake
Palomino Stake
Pinto Command
Single Harness Pony Stake
P.O.A. Pleasure Stake

9:00 N.Y.S. High School Band Competition–until 5:00 p.m.
4-H Automotive Driver Skill Contest
Judging Guernsey, Brown Swiss, Milking Shorthorn Classes

9:30 "Sheep on Foot" Carcass Show

10:00 Judging Fruit and Farm Products
Insect and Disease Collections
Christmas Trees

Ag. Ed. Demonstrations–daily
4-H Working Exhibits–daily until 8:00 p.m.

10:30 Entertainment–Frank Sinatra, Jr., Vaudeville Varieties '69 – also at 2:30 and 6:30 p.m. – same on Wednesday

11:00 Simplicity Fashion Show – also at 4:00 p.m.
Food Demonstrations – also at 12:15, 2:00, 3:45 and 5:45 every day
Auburn Children's Theatre – also at 12:00, 2:00 and 3:30 every day

11:30 Flower Judging—also on Thursday, Saturday and Sunday

P.M.

12:30 Entertainment – Big Tiny Little Dixieland Band, Frank Yankovic Polka Band, Lou Prohut and Kids – also at 4:30 and 8:30 each day

1:00 Judging Jerseys and Ayrshires
4-H Standard Breeder's Poultry Show
Sheep Fitting and Showmanship
Swine-on-Foot Carcass Barrows
Placing of 4-H Sheep Classes

1:30 Championship Spelling Bee
Swine Fitting and Showmanship
Placing of 4-H Swine Classes

7:00 Horse Show:
Appaloosa Stake
Roadster Pony Stake
Pinto Stock Horse Stake
Pinto Champion
Walking Horse Stake
Registered Roadster Pony Stake
Quarter Horse Reining Stake
Quarter Horse Champion
N.Y.S. Pleasure Horse Class – Western

State Fair Talent Hunt (Grange) each day

Wednesday, August 27

A.M.

8:00 Judging Berkshire Swine
Pigeons, Rabbits and Cavies
Dairy Cattle—Guernsey, Brown Swiss, Milking Shorthorn

Youth – Beef Fitting and Showing Contest

9:00 Judging Holsteins
Corriedale and Suffolk Sheep
Youth Homemaking Exhibits

10:00 Judging Dairy Goats
Beef Cattle-Open Steer Classes

10:30 Women's Day Morning Forum

Judging Swine – Poland China

P.M.

12:30 Women's Day Luncheon

1:00 Simplicity Fashion Show

Tractor Operator's Contest
Judging Hereford Breeding Classes
Sheep – Rambouillet and Southdown

2:00 Judging Swine – Yorkshire

7:00 Dairy Cattle Showmanship Finals

7:30 Square Dance Festival
Judging Dorset Sheep

Thursday, August 28

A.M.

8:00 Judging Hampshire Swine
Angus Breeding Classes
Ayrshires and Jerseys

8:30 Horse Show:
Green Working Hunter Open—1st and 2nd year
Jr. Working Hunter Open – Rider under 15 years
Jr. Working Hunter Open – 15-18 years
Working Hunter Open—Under Saddle
Green Conformation Model
Arabian Model Class
Horsemanship—Under 14 years
Novice Horsemanship – Flat – Under 18 years
Pleasure Morgan English
Half Arabian Western Pleasure

4-H Poultry Science Contest

9:00 Judging Hampshire and Cheviot Sheep
Dog Obedience Class
4-H Tractor Operator's Contest
4-H Vegetable Crops Contest

10:30 Entertainment – Victor Borge, Anita Bryant, Vaudeville Varieties '69 – and at 2:30 and 6:30 p.m. – same on Friday

11:00 Governor Nelson Rockefeller

P.M.

1:00 Judging Beef Cattle
Charolais Breeding Classes
Oxford and Shropshire Sheep
Duroc Swine
Dog Obedience Classes
N.Y. Purebred Dairy Cattle Association Calf Presentation

"Fashions With Wool" Show – also at 3:00 p.m.

1:30 Dairy Cattle Judging – also Male Championships

2:30 Harness Horse Races

3:00 Judging Columbia Sheep

5:15 Horse Show:
Jr. Jumpers Table I
Preliminary Jumpers Table I
Open 3-Gaited
Arabian Park Horse Jr.
Park Morgan Jr. – 4 years and under
Open Working Hunter
Amateur Owner Working Hunter
Green Working Hunter Under Saddle 1st year
Green Working Hunter Under Saddle 2nd year
Arabian English Pleasure Horse
Open Park Morgan 15 hands and over

7:30 Judging Tunis Sheep

Friday, August 29

A.M.

8:00 Judging Beef Cattle
Shorthorn Breeding Classes
Holstein Dairy Cattle
Youth—Flowers and Vegetables
Ag. Ed. Showmanship Contest

8:30 Horse Show:
Open Green Working Hunter (1st and 2nd year)
Open Jr. Working Hunter (under 15 years and 15-18 years)
Amateur Owner Working Hunter
Under Saddle
Novice Park Morgan
Novice Horsemanship – over fences – under 18 years
Jr. Jumpers Table II
Preliminary Jumpers Table I
Intermediate Jumpers Table I
Open Park Morgan Under 15 hands
Arabian Park Horses, Mare or Gelding

9:00 Ag. Ed. Contests:
Livestock, Milk, Dairy Cattle, Field and Forage Crops, Vegetable and Forage Crops, Poultry and Egg Grading, Small Gas Engine Trouble-Shooting

P.M.

1:00 4-H Horse Show

2:00 Champion Beef Carcass Auction

2:30 Harness Horse Race

4:00 Blood Brother Ceremony

5:15 Horse Show:
Open Jr. PHA Trophy Class
Pleasure Morgan Driving
Arabian Horse English Pleasure
Open Working Hunter
5-Gaited Amateur E.S.H.B.A. Trophy Class
Open Green Conformation Hunter
Regular Conformation Hunter
Arabian Mounted Native Costume
3-Gaited E.S.H.B.A.
Park Morgan—Amateur to Ride

Fitting and Showmanship Contest Results Announced

(Continued on page 16)

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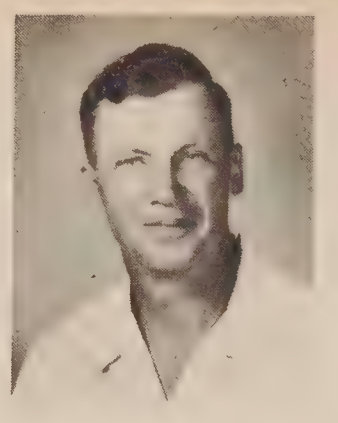


Gayway Farm Notes

by HAROLD HAWLEY

UNBELIEVABLE RESPONSE

We let our cows exercise and sun themselves on a small plot of ground next to the barn. Last fall was so wet that they cut up the sod, and a part of the area became just bare mud.

It was so cold and wet this spring that we kept the cows inside until June first. By that date, the whole bare area had become a solid mat of clover. In the 24 years we have known that field, it has been in permanent rotated pasture of mostly orchard grass, alfalfa and ladino clover.

This suggests that the clover seed must have been dormant in the ground all that time, and longer, just waiting for a time when there was little or no competition. Now I suppose there probably was always a little white clover in the pasture, but certainly not any important amount. To have it come up in a solid, and I mean solid, stand was amazing. Of course, a herd of cows plus heavy rains soon changed the looks of the "new seeding," but the fact remains that the clover responded to an opportunity.

We've all seen the same thing happen in a hayfield. If for some reason, a skip was made when putting the grass seed on, it is almost a lead-pipe cinch that weeds will come up to fill in the gap, even if the rest of the field is fairly weed-free. Competition for water, light, and plant food helps to keep some weeds waiting.

LIVE WITH THEM

The alfalfa weevil shows every evidence of having become a permanent part of the alfalfa-growing picture and cost. The panic period is over. Farmers talk about the weevil just as they talk of quack and nut grass . . . all enemies and all costly.

Just as weed problems and controls seem to vary with weather conditions and from field to field, so it is with weevils. Some fields this year were quite free of early infestations, others were bad before June first. In all our fields, there were small bad spots, especially on the knolls.

The question then was whether to go hit a few patches or wait until the rest of the field got bad enough to need spraying if it did. Some fields just seemed to hold a degree of infestation and damage which cost money to ignore, but seemed not bad enough to justify the cost of spraying plus the machinery damage to the crop.

Our experience of three years does not enable us to guess what to expect or to decide what is the smartest way to cope with a given level of infestation . . . that is, spray, or wait until the hay is off and spray the stubble, or even to ignore the rascals. Each field seems to require its own special timing and treatment.

ALIVE AND MOVING

Several years ago I had the frustrating experience of trying to shoot some jackrabbits in a mile-long field of knee-high corn out in Nebraska. Because of their coloration, and the height of the corn, it was almost impossible to see the jacks until they moved.

One would move out as soon as I'd get about close enough to shoot. When one moved, several others nearby would also take off. Literally, there were hundreds of the long jumping rascals in that big field and at times it seemed as if the field was alive and moving.

In early June, we saw what was certainly the most impressive and expensive earth moving project we've ever been unfortunate enough to witness. We've all been impressed by the tons of earth these big earth moving rigs can move but they are like pygmies at a pole vault competition compared to the job we saw done.

A three-inch rain, falling on newly planted corn ground throughout our area, moved more tons of soil than one can begin to imagine. It was most impressive and probably the most serious soil loss we've ever witnessed.

A bit of observation did bring out a few facts, however. Naturally, corn rows across the slope helped slow the flow of water. Soil that had been fitted very little, and left loose, absorbed and dammed up a lot more water than soil fitted over several times and left smooth and firm. On the latter fields, there was almost nothing to stop the flow. We also noted the good work done by some sod waterways and little strips of sod left to slow down and break up the flow of water.

I have long been concerned about the loss of soil from washing. Of equal concern is the prohibitive costs involved in having government "experts" work at this soil conservation problem. It seems so very obvious that each of us has the responsibility and opportunity to preserve our own soil resources.

After seeing what had happened to some of the beautiful black soil on many Missouri farms back in the late thirties, we became very much convinced that

(Continued on next page)

there was much to be done to reduce soil and water losses. We thought then, and still think, this is an individual farm problem with someone doing some educational work to encourage an awareness of the need to be concerned. After working at this soil and water conservation problem for a number of years, I am convinced that any of us can largely stop these losses if we are but willing to work at it.

Terracing, tiling, contour cropping, strip cropping, winter cover crops, diversion ditches, and sod waterways are all things we can each use if they fit our special needs on particular fields.

DEMONSTRATIONS

After hearing and reading about college riots and demonstrations until we were fed up and angry, we looked forward to summer when college students would be gone from the scene. Then along came the Memorial Day weekend and a whole new kind of demonstrations.

We happened to be planting near a main highway on the Thursday afternoon before Memorial Day. Otherwise responsible adults, heads of families, etc., were starting on their weekend trips.

Never have I seen so many cars driven at such high speeds nor so many people passing on double solid lines! In short, here was the typical American family with extra time off starting out to enjoy themselves together and conducting themselves as irresponsibly as a bunch of college demonstrators.

This little demonstration, according to the statistics, cost more lives than all the unfortunate campus activities of the past year. Yet no one is unduly alarmed. To kill and maim a few hundred people on a long weekend occurs with such predictable regularity that it's become an accepted part of the American scene.

Suppose a few years of campus riots will cause us to change our notions of what is normal and acceptable to the point that another riot or demonstration more or less will be hardly newsworthy?

THE FROG PONDS

The exceptional amount of rainfall this spring kept water in every little pothole and swale way well into the summer. This encouraged the wild ducks to hang around and start nesting operations.

Early morning and dusk flights of three to thirty birds have been so commonplace that we would have ceased to watch (just as with pigeons) except for one thing. It always amazes and puzzles us why a flight can be going lickety-larrup in any given direction and suddenly one or two "loners" will veer off at an angle. Of course, they eventually come back, but like as not the flock may turn a little from the original course to accommodate them.

How very much like a group of people in an organization! Everyone pulling together toward a common goal . . . then bingo, a dissenter or two. Sometimes, of course, the voice of dissent helps to bring the whole group back nearer to a true course or better objective. All too often, however, the dissenters merely serve to slow up or weaken the group effort without really accomplishing much else. So much like ducks!

TIMING

The heavy rains in our area throughout May and the first half of June caused a lot of farmers to switch their plans and practices. With some fields too wet to disc and plant, several folks we know simply hooked up their silage-making or haying equipment and worked at the hay while waiting for the corn ground to dry out. This tendency may have been pushed along by the desire to get the hay off the fields where the weevil was worst, or at least earliest.

The cornfields that were planted last merely emphasize the size of the plant breeder's job. Some of last year's corn, which was supposed to be 90-or-100-day corn, turned out to be 365-to-380-day corn . . . to be followed by corn planted in mid-June which might have to be ripe in 85-90 days.

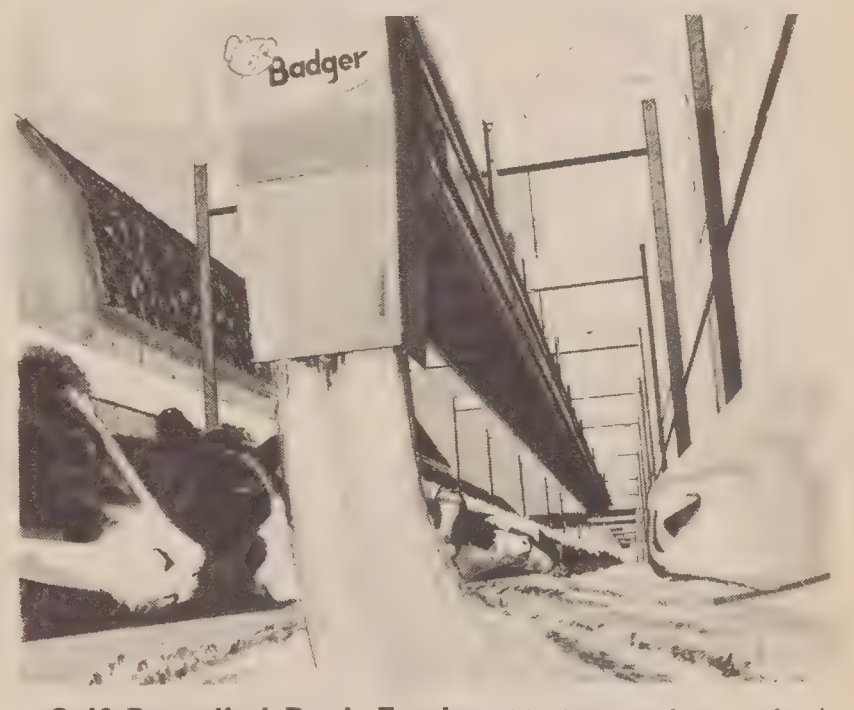
Incidentally, let's hope they never get to prove it again, but the plant breeders who had the stiff-stalked varieties sure got a chance to win friends and influence people with corn which stood 6 to 7 months beyond normal harvest time. We picked some in June and were absolutely amazed to find almost no down stalks. Believe you me, a salesman for any other brand of corn would have to really "pour it on" to change us right now!

By the time men learn to behave themselves, they're too old for anything else.

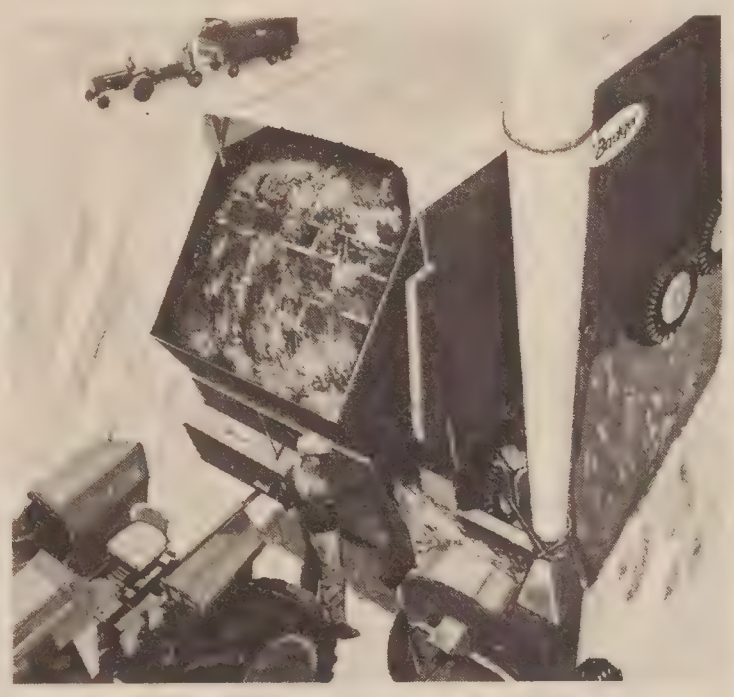
See you at the Empire Field Days! August 5 through 7

On display—our complete line of equipment.
—Plus our farmstead materials handling experts will be on hand to demonstrate the equipment, answer your questions, and help you plan your new feeding or manure handling systems.
Before you make a move see us—we can make things move better for you!

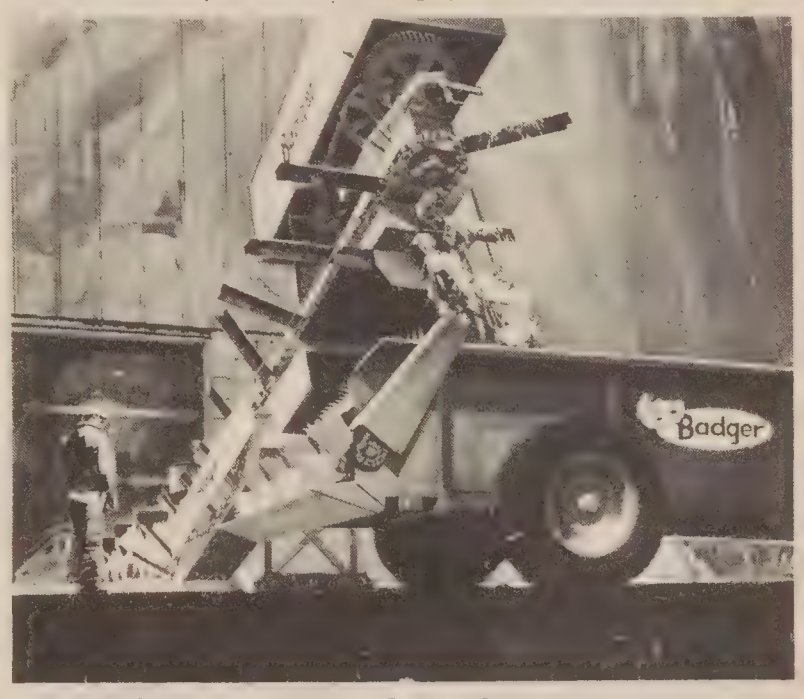
The XP/24 Silo Unloader—This is the power unloader. The first unloader to shoot silage unassisted out the door of a 30-foot silo. Has the power to pour down silage faster than any unloader ever before . . . power to chew out rock-solid frozen silage. It's America's biggest selling silo unloader.



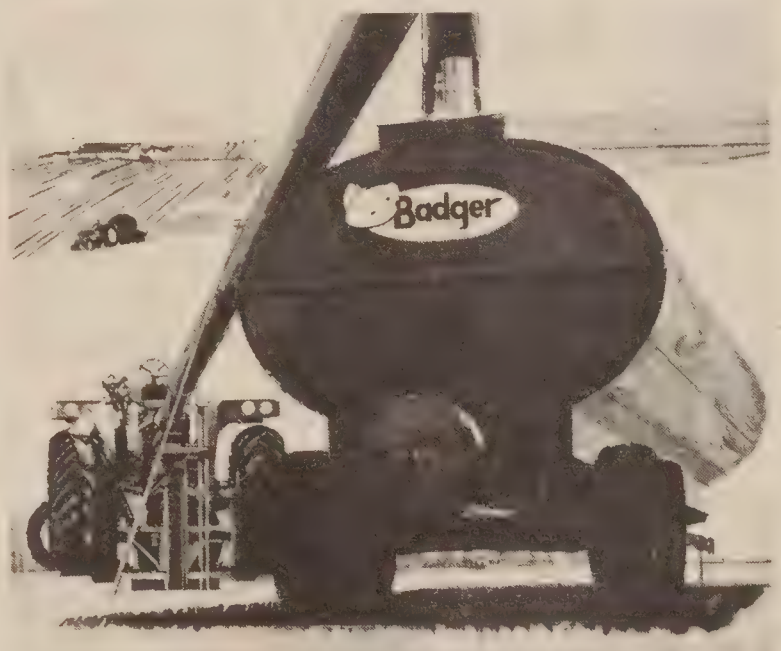
Self-Propelled Bunk Feeder—It's the new, faster, safer, low horsepower, long-lasting automatic feeder. Ideal for stanchion barn feeding, or outside installations. One h.p. motor handles 150 feet of bunk. Delivers 1,200 pounds of corn silage per minute. Handles any type silage.



Forage Box, Blower, Silage Distributor—The Badger Box is for the man who wants to put up more tons per day. Wants to haul bigger loads. Wants to unload them faster. New 54-inch blower takes full discharge from Badger's biggest box. Silage Distributor boosts your silo capacity.



Barn Cleaner, Manure Spreader—You have to see it to believe it! A Badger Barn Cleaner is virtually a *permanent improvement* in your barn—thick, heavy gears, drop forged chain, giant semi-steel main casting, two inch bar shaft. It's the ultimate in barn cleaners—and at a reasonable cost to you. New! See the rugged new Badger Spreader, too! Holds 240 bushels, turns shorter, costs less.



Liquid Manure System—See the Badger Liquid Manure pump with its remarkable agitation power, fast loading speed. This is the pump that blasts out and stirs up the settled material—quickly converts it to pumpable slurry. And the Badger Liquid Manure Tank is the proven, long-lasting, easy-to-operate spreading unit.

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Badger *makes things move!*

☐ Silo Unloaders, ☐ Beef Feeding Systems, ☐ Dairy Feeding Systems, ☐ Forage Boxes, ☐ Barn Cleaners, ☐ Feed Conveyors, ☐ Silage Distributors, ☐ Liquid Manure Systems, ☐ Forage Blowers, ☐ Badger Dealership

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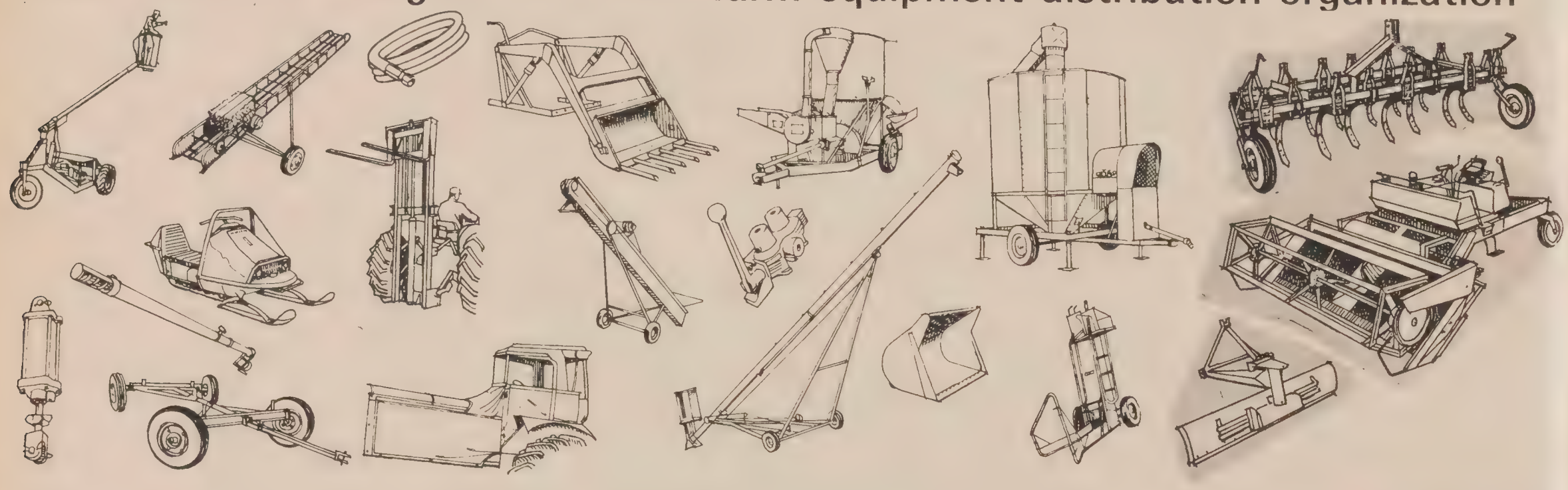

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IT'S Versatile TRACTORS

Super D | Custom-90 | Super-1000 | BHB | Forage Box

Fox Tractor
Farm Division of Koehring Company
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THESE FEATURES MAKE KVERNELANDS HYDREIN

SEMI-MOUNTED 4-7 FURROW PLOWS THE MOST VERSATILE ON THE MARKET

- More under-beam clearance.
- Mouldboards specially designed to cope with all soil conditions. Available in 12", 13", 14" and 16".
- Turn a perfect furrow in low speed or high.
- Under extreme conditions, one or more bottoms can be easily swung into park position.
- Can be extended from 4 to 7 furrow to suit your customers' needs.
- Available with rigid or trip beam and also available as 2 to 5 furrow fully mounted.

STENOMAT (illustrated) provides non-stop plowing in stony ground. Bottoms trip and reset automatically (no backing up)
Norcan equipment is priced to sell. Write for dealer information.

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NEW WOODS OFFSET MODEL 0210

The Rotary Cutter Designed For Orchard and Nut Grove Mowing and Pruning Disposal

TWIN BLADES ▪ GEAR DRIVE
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- Offset design mows 8-1/2′ to right of tractors center line
- Shreds pruning up to 3″ Dia.
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new twin spinner spreader-seeder

Ideal for farms, orchards, vineyards, parks, highways, golf courses. Fits three-point hitch tractors.

This low-cost compact holds 900 pounds of fertilizer . . . 11 bushels of seed. Broadcasts all types of fertilizer and many seeds. Spreads uniformly to either side or band spreads with optional attachment. Who says you can't do seeding and spreading jobs economically?

A machine this good has to come from

AVCO EZEE FLOW

----------MAIL COUPON FOR COMPLETE INFORMATION----------

AVCO EZEE FLOW DIVISION, DEPT. 225, COLDWATER, OHIO 45828

Please send full information on the New Avco Ezee Flow Twin Spinner Spreader and Seeder.

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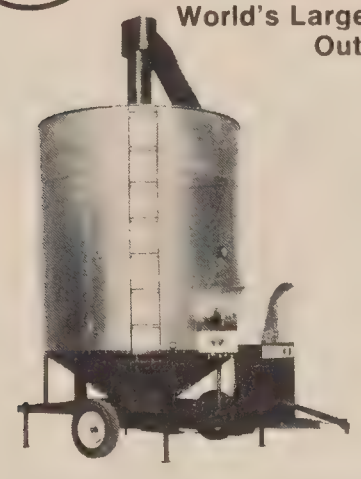
G/T TOX-O-WIK® QUALITY GRAIN DRYERS USE **BOTH** TO KEEP GRAIN DRYING COSTS LOW!

World's Largest Selling Round Bin Dryer Out-Performs Them All with Continuous Recirculation!



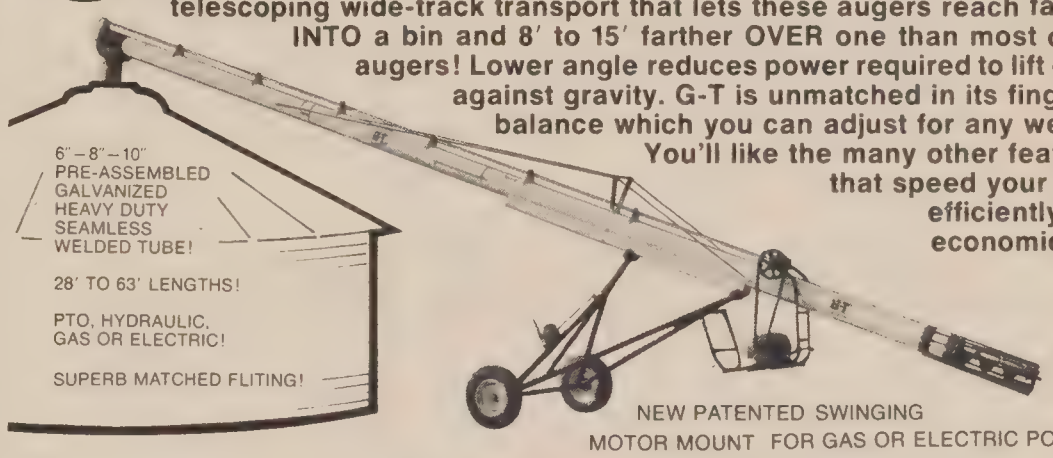
G-T Tox-O-Wik Dryers have vertical, perforated round bins with cone-shaped bottoms, which *give greater capacity, more effective drying, lower operating cost and require less power.* Only one vertical auger is required since gravity returns grain to bottom of cone. Perforated bin gives unobstructed air flow. Heated air, blown into inner chamber, passes thru grain and out of outer bin, carrying moisture with it.

Automatic controls protect grain, assure safety, minimize trouble

You stay ahead of harvest, ahead of the weather with a G-T Dryer! Many owners dry over 100,000 bushels a season! G-T's simple, automatic controls make it possible for the operator to do a perfect job of drying any grain. Positive action agitator assures fast, even drying... prevents overheating. Available in 250, 350 and 500 bushel sizes. PTO drive standard. Electric motor mounting kit optional. Gasoline engine power also available.

G/T AUGERS OUT-REACH & OUT-LAST THEM ALL!

You owe it to yourself to look at G-T's Quality Augers with telescoping wide-track transport that lets these augers reach farther INTO a bin and 8′ to 15′ farther OVER one than most other augers! Lower angle reduces power required to lift grain against gravity. G-T is unmatched in its fingertip balance which you can adjust for any weight. You'll like the many other features that speed your work efficiently and economically!



GILMORE/TATGE MANUFACTURING CO., INC.
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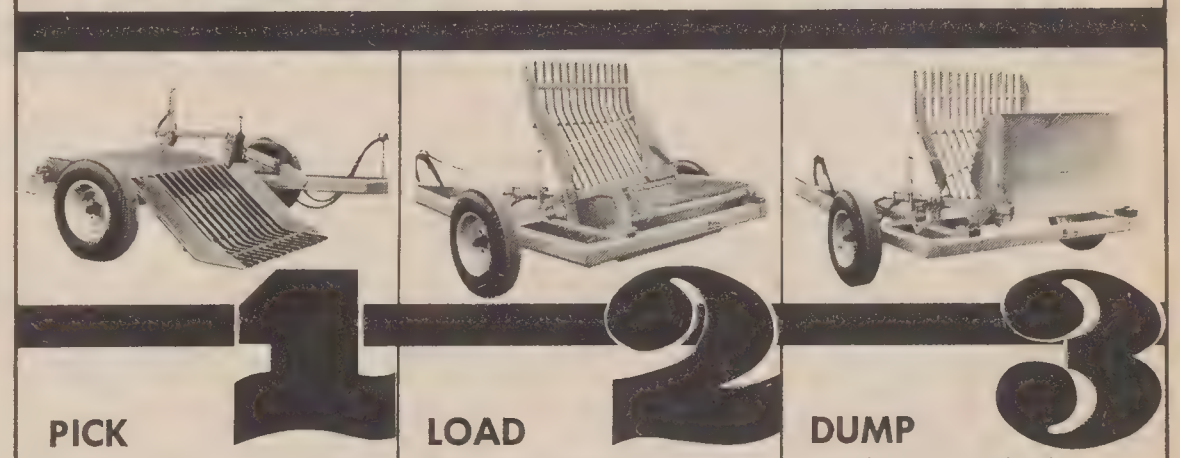
PICK A TON in 15 MINUTES!

WESTGO ROCK PICKER



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A ton of rocks in 15 minutes with the WESTGO Heavy-Duty Hydraulic Rock Picker. Operate with any two- or three-plow tractor.

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Into 4-foot hopper that carries 2,000 pounds. Operator has full visibility at all times. Unit locks during transport.

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Anywhere . . . in slough or corner of field. Unit weighs 1,000 pounds, is 7-ft., 11-inches wide, 10-ft., 6-inches long.

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See this big harrow in action . . .
EMPIRE FARM DAYS

Taylor-Way Model 200202 Wing-Type
Wheel Mounted Tandem Harrow

NINE SIZES AVAILABLE . . . FAST AND EFFICIENT

MAKES FARMING PAY
Taylor-Way®

(Continued from page 10)

Saturday, August 30

A.M.

8:00 Horse Show:
Horsemanship Hunter Seat (under 18 years and under 14 years)
Open Horsemanship Saddle Seat – under 18 years
National Horse Show Saddle Seat Event – Under 18 years
A.S.P.C.A. Horsemanship Class
Preliminary Jumpers Table I
Jr. Jumpers Table I
Intermediate Jumpers Table II
Arabian Western Pleasure Class
Combination Morgan Pleasure
Jr. Working Hunter Appointment (under 15 years and 15-18 years)
Amateur Owner Working Hunter
Jr. Exhibitors 3-Gaited Saddle Horse

10:00 Competition for $200 H.S. Duncan Memorial Award

10:30 Entertainment – George Kirby, The Golddiggers, Vaudeville Varieties '69 – also at 2:30 and 6:30 p.m. Same on Sunday

P.M.

2:00 Championship Microd Races

5:00 4-H Dress Revue – also at 5:00 p.m.

7:00 Horse Show:
Open Jumpers Table II
Open Fine Harness
Half Arabian Mounted Native Costume
Open American Saddlebred 3-Gaited Pleasure
Park Morgan – Ladies
Open 5-Gaited
Arabian Park Horse – Stallion
Working Hunter – Ladies to ride
Open Green Working Hunter (1st and 2nd year)
Green Conformation Hunter Under Saddle
Regular Conformation Hunter Under Saddle

Senior Citizens Square Dance

Sunday, August 31

A.M.

8:00 Horse Show:
Half Arabian Halter Classes
Arabian Halter
Morgan Halter

8:30 Horse Show:
Junior Jumpers Fault and Out
Preliminary Jumper Stake Table II
Intermediate Jumpers Table II
A.H.S.A. Medal Class Saddle Seat
Open Green Working Hunter (1st and 2nd year)
Jr. Working Hunter Under Saddle (under 15 years and 15-18 years)
A.H.S.A. Hunter Seat Medal Class
Park Morgan in Harness
Half Arabian Pleasure Championship

P.M.

12:30 4-H Horse Judging Contest

2:00 McCall's Fashion Show – also at 4:00 p.m. – and on Sunday

3:00 Parade of Historic Automobiles
Religious Service

5:00 Polo Semi-Finals

6:00 Youth Showmanship Examination, English and Pony

6:30 Youth English Horse Conformation Classes

7:00 Horse Show:
Open Jumper Fault and Out, Time Limit
5-Gaited Amateur Stake
Arabian Pleasure Stake, English Tack
Parade of Fair Champions
Open Working Hunter Appointment
Green Conformation Hunter Stake
Green Conformation Hunter Championship
Regular Conformation Hunter Stake
Regular Conformation Hunter Championship
Amateur Owner Working Hunter Stake
Amateur Owner Working Hunter Championship
Jr. Exhibitors 3-Gaited Saddle Horse Stake
Pleasure Morgan Driving Championship

8:30 Parade of Champions – Dairy Cattle, Beef Cattle, Sheep, Swine, Goats

Monday, September 1

A.M.

8:00 Horse Show:
Percheron Halter
Belgian Halter
Grade Halter

8:30 Horse Show:
Green Working Hunter Stake (1st and 2nd year)
Green Working Hunter Championship (1st and 2nd year)

(Continued on page 17)

Today, power has a new name.
NUFFIELD.

Now that Nuffield has arrived, you can put your tractor money into the thing that matters—performance, not chrome and clutter. With Nuffield, you get more working weight and horsepower per dollar than any other tractor in its class. ☐ Who makes it? Who backs you for parts and service? The same international corporation—British Leyland Motors—that has made Jaguar, MG, Austin, Triumph, Rover and Land Rover respected names throughout the world. ☐ Write your Nuffield distributor for complete details, and make your tractor money work harder for you. A whole lot harder.

ALLIED FARM EQUIPMENT INC.
McCune-Frick Division, 3721 Mahoning Avenue,
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BRITISH LEYLAND
NUFFIELD
TRACTORS

69-H21

Jr. Working Hunter Stake (under 15 years and 15-18 years)
Jr. Working Hunter Championship 15-18 years
Jr. Grand Champion and Reserve Grand Champion
Open Horsemanship Saddle Seat Championship
Half Arabian English Pleasure Championship — Pairs over 3600
Pleasure Morgan Championship
Horsemanship Championship
Intermediate Jumper Stake Table II
3-Gaited Amateur Stake
3-Gaited Pleasure Regional Qualifying Stake
Arabian Pleasure Stake — Western Tack
Onondaga Awards — P.H.A.

8:45 Performance and Equitation Classes

10:30 Entertainment — Bill Anderson, Leroy Van Dyke, Rufe Davis, Crazy Elmer, Vaudeville Varieties '69 — also at 2:30 and 6:30 p.m.

P.M.
1:00 Championship Stock Car Races

2:00 McCall's Fashion Show — also at 4:00 p.m.

7:00 Horse Show:
Jr. Jumper Stake Table II
Jr. Jumper Championship and Reserve
Open Jumper Stake Table II
5-Gaited Saddle Horse Championship Stake
Arabian Park Horse Championship
Six Horse Hitch
Park Morgan Saddle Championship
Fine Harness Championship Stake
3-Gaited Stake and Championship
Working Hunter Stake
Working Hunter Champion and Reserve

FORESTRY

Shade Trees — A free publication, "The Planting and Care of Shade Trees," Bulletin No. 22, will be mailed on request by the Mail Service, University of New Hampshire, Durham, New Hampshire 03824.

Distributed by the UNH Cooperative Extension Service, it contains description of trees suitable for planting, information on pruning, fertilization, obtaining stock, mechanical care, spraying, the New Hampshire arborist law, and help in diagnosing the principal causes of injury to trees and shrubs.

Copies are also available at each of the 10 county Cooperative Extension Service offices in New Hampshire. Similar bulletins are available from all the state colleges of agriculture.

New Wood Finish — A chromate wood finish capable of "painting" an entire barn in 2½ hours at a cost of about $25 . . . and with no special equipment . . . is in the experimental stages at the University of Wisconsin.

Developed by the U.S. Forest Products Laboratory, the new material is made up mostly of water and a few essential chemicals, and costs about 51 cents a gallon. Scientists explain that chemicals in the chromate finish combine with sugars in the wood to give a case-hardened finish that will protect rough sawn, weathered lumber with knots and other defects . . . as well as exterior type plywoods . . . for from four to six years. For most rough sawn lumber a gallon will cover 200 square feet. Ease of application is another advantage.

Like most good things, however, it has a drawback . . . it comes in any color you want as long as you want grey-green. There's no other color choice.

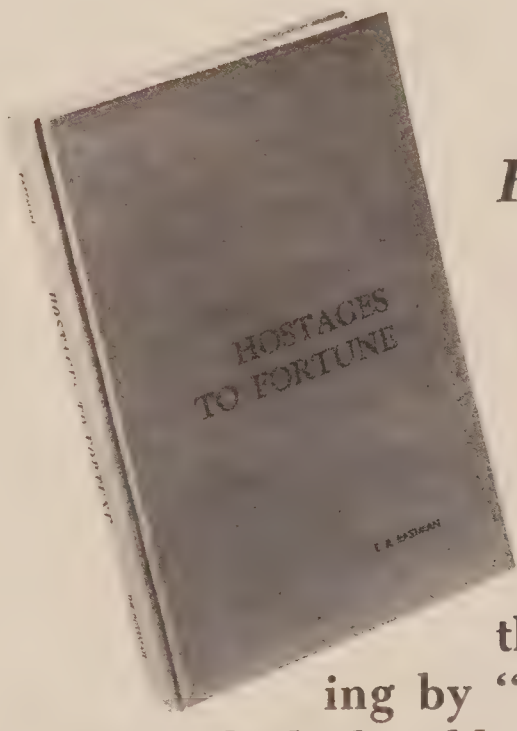
For full details, write: Glenn Barquest, College of Agriculture and Life Sciences, University of Wisconsin, Madison, Wisconsin 53706.

Douglas Fir — Needle cast disease has been a real problem to most growers of Douglas Fir in the Northeast. Gary Sander, Extension forester of Oregon, has summed up available information about the disease as follows: Planting Douglas Fir selections resistant to the disease is the best control measure. Sander also suggests spraying with liquid lime sulfur or the fungicide Ferbam at ten-day intervals during the time that buds are swelling.

Penn's Streams — Anyone planning to vacation in "Penn's Woods" may find the stream map of Pennsylvania handy. Maps are scaled to six miles to the inch and include a host of geographical features. Names and locations of major mountains, valleys, dams, swamps and lakes, reservoirs are indicated. To get a copy, send $1.06 to: Stream Map, Box 6000, University Park, Pennsylvania 16802. Make check or money order payable to Pennsylvania State University, and be sure to indicate whether you want a flat or folded map.

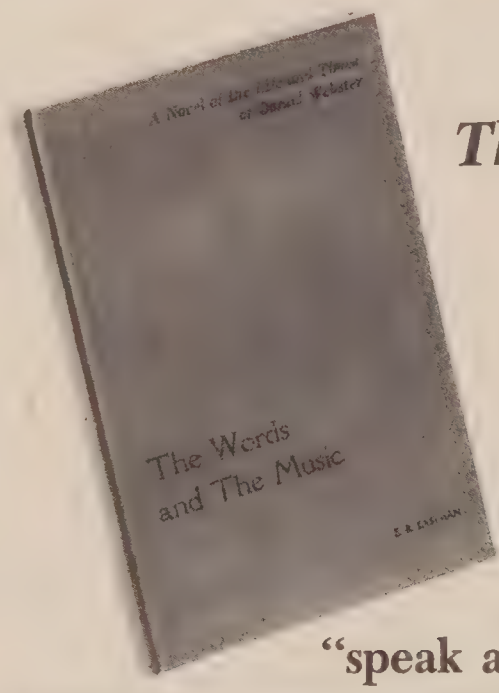
New Yorkers will have a once-in-a-lifetime opportunity in the summer of 1969 at Niagara Falls. The Niagara Frontier State Park Commission will feature the drying up of the American Falls. This is being done to examine the deterioration of the cliffs and the river bed structure.

E. R. Eastman's Books



Hostages To Fortune

Throughout this novel of early days in the Finger Lakes Region of New York runs a tender and understanding love story. Interwoven into it is the eternal and inevitable conflict between the generations . . . the new ideas of farming by "book larnin' " and the tried and true ways to which the older generation clung so tenaciously.



The Words and The Music

Even as a small boy Dan Webster showed that power of oratory which led him on to leadership in one of America's most turbulent periods. The teamsters who stopped at his father's tavern would tease little Dan to "speak a piece."

Here's an opportunity to add to your library of Ed Eastman's writings at a big savings.

Through a special arrangement with the publishers we are able to offer both of these books at a special price of $4.85, plus 45 cents for handling, postage and New York State tax. May be ordered separately; tax, and post paid for $3.33 each.

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Trade'N Save, now!

Swing into the '70s ready for profitable farming.

The Ford "Trade 'N Save" plan is back—looking better than ever in these days of tight money.

Take advantage of "Trade 'N Save" to move up to new, quality equipment in Ford Blue. Do it now at 1969 prices. Forget winterizing expenses, new batteries, tune-ups or repairs on old rigs. Complete Fall tillage and harvesting; do Winter chores with brand new Ford tractors and equipment. Smooth-running. Easy starting. Let the Ford "Trade 'N Save" plan relieve the strain on your cash reserves and local credit sources.

"Trade 'N Save" applies to new Ford farm tractors, implements, haying and harvesting equipment, including combines.

Here's how it works. Say you need a new tractor and plow for next season. You trade now, this Fall, and take delivery on the new rig. Your trade-in probably covered the down payment.

Under "Trade 'N Save," payments start later . . . in 1970*. At that time, payments begin on a financing plan that was tailored to your needs.

Act now. Get new Ford Blue equipment at 1969 prices. Your trade in is worth more now—a season younger than it will be next Spring. What better way to start farming in the 70's? See your Ford Blue tractor and equipment dealer.

*Depends on equipment chosen. See your dealer for dates, details.

Ford Blue . . .
your key to greater quality.

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Ford

Cows at Noblehurst are washed down with water purified by ozone.

OZONE TO THE RESCUE

Noblehurst Farms, Linwood, New York, about 30 miles southwest of Rochester, has been in the Noble family for more than 150 years. It's operated by a family-owned corporation under the leadership of Ken Noble, and his son John.

One of the several Noble farms is devoted to dairy products, and the 312 Holsteins on the farm are a prized herd. It was on this farm that the Nobles encountered a serious water problem.

Well Water

Water for Noblehurst is obtained from private wells and, like some other areas of the country, the water flowing under the Noble's property has a high sulphur content. For a number of years the Nobles used a chlorination system in an attempt to remove the sulphur from the water. This was only partially effective, however, because the chlorine could not remove all of the sulphur . . . as well as having several other disadvantages.

In 1966, the Nobles heard that a new system of purifying water with ozone was being developed by Ozonator Corporation of Batavia, New York, for home use. Ozone had been used to purify municipal water in cities, but Ozonator was the first to develop an ozone water purifier for homes on private water supplies. Willing to experiment, the Nobles contacted the company and obtained a unit.

Electric

The system electrically generates ozone from surrounding air and injects it into the water flow where it combines with and neutralizes water impurities such as sulphur, iron, manganese and lignite. This oxidation process creates new and harmless particles that are easily filtered out. In addition, ozone attacks and destroys bacteria and algae in the water.

The Nobles report that the system eliminated the sulphur taste and smell from their water supply. They also comment that there is no longer any chlorine in the water to irritate cows' udders, and the problem of corrosion and blackening of pipes and metal equipment in the barn has vanished . . . plumbing stays clean . . . and blue salts no longer accumulate at joints, fittings and valves.

FARM SAFETY STUDY

For the remainder of 1969, some 3150 commercial farms in 11 New York counties will be part of a study to determine the "how to" of reducing the on-farm accident rate in a state-authorized study conducted by the Advisory Council on Farm Labor Safety.

In June, trained volunteers from cooperating farm organizations began their visits to a random 25 percent of farms in the counties of Chautauqua, Cortland, Oneida, Orleans, St. Lawrence, Steuben, Suffolk, Ulster, Washington, Wayne and Yates.

They want to learn the proportion of farms where one or more accidents have occurred, and the frequency, severity, type and causes of accidental injury to farm folks. The same farms will receive follow-up visits in September and again in December.

Farming ranks third on the list of "most dangerous occupations," and the answers in this survey may help to reduce the odds in the Empire State.

SAFETY CONTEST

Information about the "Safety Book Contest" sponsored by the New York State Rural Safety Council for any boy or girl 10 to 19 years of age, can be obtained by writing to: Room 322, Riley-Robb Hall, Cornell University, Ithaca, New York 14850. Top prize is a $50 savings bond; $25 savings bonds go to second and third place winners.

Deadline for entries is December 1.

100 PER CENT

Lloyd Mantle

"I purchased my Model 2412T American Automated grain dryer last year. Previously I had been drying in the bin. My new set up is a 100% improvement over the way we had been drying. I really appreciate the simplicity of this American dryer—the few moving parts. There's really nothing to wear out on this machine. We ran all night long, drying corn without a person around. Just had no problems—automation really works! Quality of our dried corn is just great!"

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Division of AFE Industries, Inc.

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MINUTE MAN
Stanfordville, N.Y. 12581

Urban roadside stand . . .

(Continued from page 6)

they often will buy many other non-related items."

A customer at Tice Farms today can purchase anything from TV dinners, jams and jellies, to charcoal for barbecue pits. In addition to produce grown on the farm, he can buy citrus fruits, out-of-season vegetables, even shrubbery and rose bushes. Tice Farms purchase many of these products through the New Jersey Certified Markets Association, an organization sponsored by the Farm Bureau. Supplying such items is one function of the Association, but its primary purpose is to promote better retailing through roadside markets.

Autumn is the busiest selling season for Tice Farms. "Hallowe'en, with its pumpkin sales, is just about our most important holiday," Dick said. "Thanksgiving also is a very busy time. Then we sell homemade pies, turkeys, and pumpkins." Business is so good during these two holidays that the farm must hire five policemen to direct traffic in front of the store. "The city provides the policemen," Dick said," but we pay their wages."

Promotion

Probably the most famous promotion scheme employed by Tice Farms is their apple cider sales in the fall. "We advertise 'all the cider you can drink for 10 cents,' Dick said. "We don't make any money on the cider, but it really brings in the customers." Cider is made on the farm from early October until spring.

Except for an occasional newspaper ad or spot radio announcement when a particular product is overstocked, Tice Farms does no other advertising. "We don't need to," says Dick. "Our reputation and the fact that we have been here so long is our best advertisement. Our farm is an established landmark of the county. Everyone knows where Tice Farms is."

Dick recalls with amusement the day he was shopping at Abercrombie and Fitch, a posh Madison Avenue department store. The salesman, upon hearing Dick's name, informed him that he had often heard the farm mentioned by some of his wealthy clientele.

Recently, two large supermarket chains, Grand Union and A & P, completed large stores near Tice Farms. At first worried that they would hurt business, Dick has found their effect to be just the opposite. "Many customers come into the area to shop at the supermarkets, then come to Tice Farms to buy their fresh produce," he said.

Tice Farms is open for business seven days a week, year 'round; they close only for Christmas and New Year's Day. College and high school students provide much of the sales help, but the store, like the farm, is largely a family affair. Dick's wife and Mrs. Mahoney manage many operations within the store, his mother prepares and sells flowers and potted plants, his sister is the full-time bookkeeper, an aunt operates the bakery shop, and his three children, Susan, Donna, and Richard, work in the store after school and on weekends. During the busiest part of the year Tice Farms employs about 50 persons, including both store help and farm labor.

Can Tice Farms justify its return on the land, as compared to alternative enterprises? "Not really," answers Dick. "You have to like this kind of work. And you have to be on the lookout for new ways to make it pay. But business is very good, and we see a real future in our retail market."

A visitor to the farm would have to agree that business is very good. On weekends the large paved parking area across the road from the store is filled with cars. Customers swarm throughout the store and often stand in line to make their many purchases. Customers seem to be one commodity that Tice Farms has plenty of. But why shouldn't they? As Dick said, "There are quite a few million people living a few miles from here."

PLASTIC MULCH

Home gardeners are finding plastic mulches a convenient and relatively inexpensive replacement for the organic mulches . . . such as straw, bark, woodchips, sawdust, or whatever. Unlike the organic mulches, plastic can almost entirely control weeds on the space covered.

Plastic mulches . . . thin polyethylene sheets in varying types. sizes and colors . . . are impervious to moisture. Rainfall enters the soil through openings where the plants are growing or under the edges. As this water evaporates from the soil, it is caught and condensed on the underside of the plastic; these droplets keep the soil uniformly moist throughout the entire growing season. Air space under the film acts as insulation, and soil temperatures remain moderate.

American Agriculturist, August, 1969

10 acres, 4 hrs., 10 min. only 16.2 gallons

Dick Schmidt shows how far Hydraul-Shift can put you ahead with a 1650

Bremen, Indiana, May 7. It's Time Maker test day on the Richard Schmidt farm in St. Joseph County, Indiana. The tractor is a 1650 diesel with Hydraul-Shift—certified at 66 PTO horsepower. Behind it, four 16-inch plow bottoms. Dick Schmidt is on the starting line. At 9:14 he gets the flag.

What gear? Dick is rolling in third gear, plowing 7 to 8 inches deep. With Hydraul-Shift, he changes speed without a pause to meet changing soil conditions across the field. Where the soil is sandy, he's in overdrive—5.2 mph. Normal plowing, in direct—4.3 mph. Through the gumbo spots, it's underdrive—20% more pull than direct at 3.6 mph.

Fast reset. Dick hits a rock and trips No. 2 bottom. He backs up to reset the Cushion-Action trip, lifts to clear the rock, and is rolling full speed as the plow goes back into the ground. All within 4 or 5 seconds. He'll lose less than a minute from 10 or 12 tripped bottoms.

What made the difference? What did it take to shave 50 minutes from 5 hours usual plowing time? The answer is Hydraul-Shift. And the way it harnesses full power to changing conditions with no time out for shifting. "I just kept those green horses working," Dick explains.

See what the 1650 with Hydraul-Shift can do on your farm. See your Oliver dealer. Oliver Corporation, Chicago, Illinois 60606. Subsidiary of White Motor Corporation.

1:24 p.m. The Finish. 10 acres plowed. Dick Schmidt has completed the measured acreage without leaving the tractor seat. Time, 4 hrs., 10 min. That compares with an expected 5 hrs. plowing time. And he used only 1.62 gal. of fuel per acre.

"See Oliver in action at the Empire Farm Days."

OLIVER
THE TIME MAKER

by Robert Clingan

THE THERAPY OF HELPING OTHERS

A general hospital near my home has a useful and effective program of assisting persons through initial steps in examination and treatment. It deals entirely with patients sent to its hospital for routine physical check-ups, before full diagnosis is made and special treatment prescribed.

This period of having tests made, waiting for reports, and wondering what doctors and a psychiatrist are going to suggest, can be very tense, depressing, and a time of genuine anxiety. Instead, in this hospital it has become an opportunity for a kind of therapy that sometimes "works wonders."

"You have no idea," said a person employed in the program, "what a difference a few hours of our kind of a program sometimes makes in a person's entire outlook!"

"What do they do? What can be done?" I wanted to know, and was informed that the program consists of bringing these persons together. In an atmosphere of acceptance and encouragement the entire group becomes busy. Their "busy-ness" is not contrived tasks or self-improvement, or preparation for vocational reassignment, or even remunerative employment; the work undertaken is doing something useful for someone else in need.

Filling A Need

One of the main tasks has been the making of cancer dressing pads. Here is a need, and each person in the program does something for someone whose life has been touched by cancer. This work cannot be underrated or undervalued. It is useful, it is important, it takes effort, and it is for someone else with an entirely different kind of affliction. All elements of self-interest are missing, and it is out of this moving away from self-interest and self-concern into useful work for others that therapy begins.

The entire program is under the guidance of a competent psychiatrist of the county mental health clinic. It is no "cure-all," no substitute for the treatment that will be prescribed. Yet, in an atmosphere of acceptance and encouragement . . . engaging in useful work helpful to someone else . . . healing begins to take place.

Years ago a Dr. Carroll had an outstanding sanitarium in the South for persons with various kinds of emotional illness. At the height of his success and renown he visited a number of college campuses in the North to talk on religion and mental health. In one conference he said, "If I could cut the words 'I,' 'me,' and 'mine' out of the vocabulary of all my patients, 90 percent would be healed tomorrow morning." Dr. Carroll was not saying that all who are mentally ill are personally selfish. He was saying that, for many, years of self-centeredness have exacted their toll. Many persons who are ill can begin their recovery only when they start living outside themselves.

Did not our Lord say, "He that would save his life will lose it?" Only by extending our circle of concern and service, and ministering to others do our own lives begin to find the wholeness and the healing they need.

AUGUST GIFT

The land is hard and dry. Balloons of dust
Blown giant size by idle, useless winds
Drift off behind the tractor, scratching through
The long, parched rows to loosen chunks of soil
And hold each drop, should any moisture come;
Each day the black clouds hover, taunting me,
And then move on to bless some other farm.
Today they hang again. But wait! a flash
On high; God claps His hands with rending crash;
The firmament makes haste to do His will.
The skies let go, cascade in torrents down
On earth below, which drinks and drinks again
To quench a long-consuming thirst;
and I,
Now drenched, rejoice-and silently give thanks.

—Diane Scott

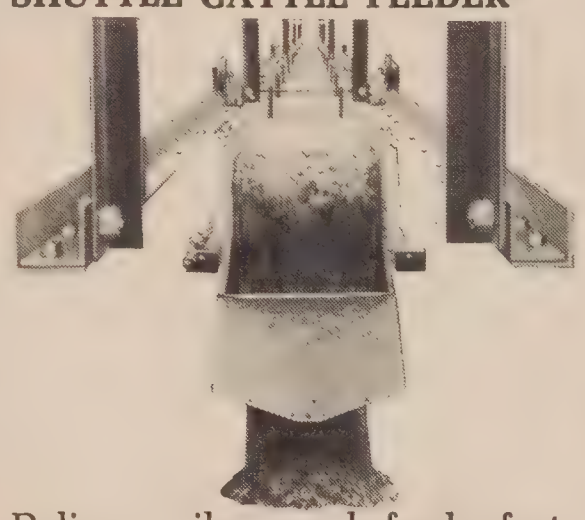
Cut your labor cost for feeding 70 cows to less than the cost of a candy bar.

Only 9¢ of electricity per feeding! From Craine silo to herd, that's all it takes for an Agway automated feeding system to power a high-silage feeding to 70 cows. It's *the* labor-saving system for now and for the future.

An Agway specialist can tell you all about it. The coupon below will bring you information on the components.

Agway

AGWAY-STARLINE SWEEP SHUTTLE CATTLE FEEDER



Delivers silage and feeds fast, without separation, to assure even feeding all along the bunk. And does it quietly, without exciting the shy ones. Power requirements are two-thirds less than those of other feeders of comparable size. Best of all, it operates with just three moving parts, so maintenance costs are low, trouble-free service is long.

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Boosts silage output 50 percent or more. The design of the unique high-speed auger and impeller rotor is the secret of its unmatched performance. It rips through the hardest pack and throws down 30 bushels in just 3 minutes. The Model 70 is silage-hungry, but very lean on power requirements.

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To store silage in prime condition, economically. Constructed with the strongest concrete stave in the business—2½ times stronger than ordinary staves. Fully interlocking sides plus 5-cell truss construction. Prefer bottom unloading? Ask for details on the Agway Towermatic® with bottom unloading flexibility and all the structural advantages of a Craine.

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County ..... State ..... Zip .....

Herd size is ..... Dairy ..... Beef .....; Student ☐

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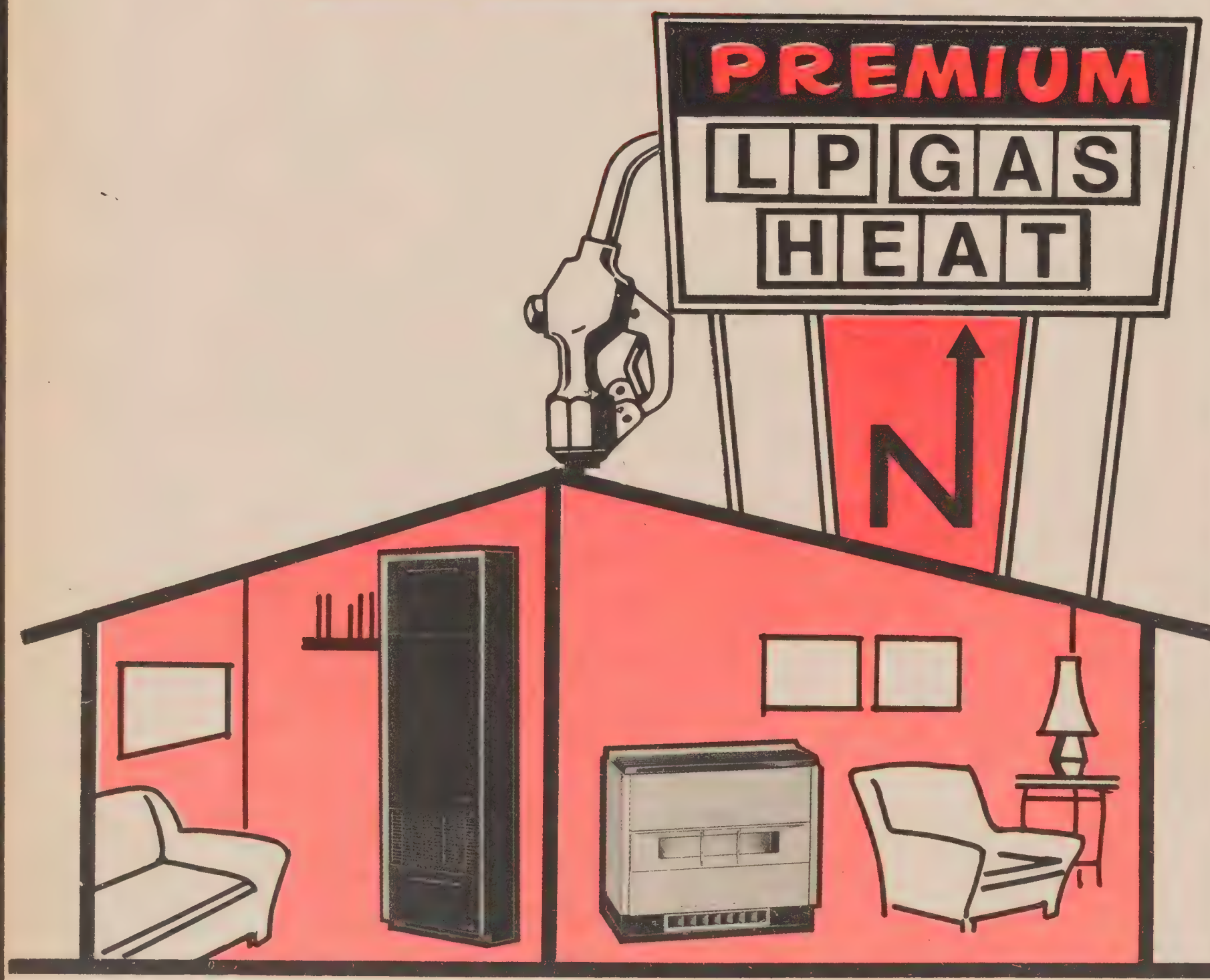

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East Main Garage
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Van Deusen & Co.

The first section of Alcorn's veal growing house has two rows of calves headed in. Building is insulated, well lighted, has concrete floors. When photographed, it was nearly ready for cleaning and a new batch of young calves.

VEAL PRODUCER

By Bob Cudworth

"This kind of veal operation is a gamble . . . there are many risks because of the disease problem and uncertain marketing . . . and as you get bigger the risks multiply."

So says Robert Alcorn, Locke, New York, who has gone into the veal calf business in a big way.

He has built the second section of a growing house that has capacity for 550 calves . . . 500 in individual stalls, and 50 more in box stalls. He has operated in the first section of this building since May, 1968. With the help of his stepson, he also raises about 60 calves at a time in the converted dairy barn where he first started growing veal calves.

Bob Alcorn is a butcher by training and has grown veal calves for more than three years. He has a buyer who obtains bob calves for him, and he grows them for the New York City market so they reach 300 pounds weight in about 14 weeks.

He feels that the first section of veal house has worked well from an efficiency and sanitation standpoint. It is 40 ft. × 184 ft. with three rows of calves. There are 300 individual stalls and room in a box stall for 30 more.

All calves are raised on slats in pre-fabricated stalls which Alcorn assembles.

Floors are concrete with gutters behind each row of stalls which empty into a main gutter and then into a pit tank. Future plans call for the manure to empty directly into a tank on a truck and then be spread.

Bob Alcorn expects that he, his wife and a helper will handle all the chores for the full 550-calf complex.

He points out that Mrs. Alcorn does an excellent job of feeding the calves. The program is to use a starter feed (25 percent fat), mixed with warmed water for a few weeks . . . and then switch to a finisher ration. Calves are fed every 12 hours with a heavier concentration of the starter as the calf gets older.

Bob points out that he does give extra feed to rapid growers or unusually large calves that can handle it.

He notes that most of the calves he gets are straight dairy-type calves, but that he does like to get Angus-bred or other cross-bred calves. The cross-breds are stronger, hardier and less susceptible to mortality.

High mortality is the bugaboo in an operation like this. "If we can hold it to 2% mortality, that's good . . . but as the operation gets bigger, the percentage of mortality picks up. When calves reach 6 weeks, there is usually little problem with mortality," he notes.

Just as proper feeding is important, so is the right heat and humidity, control of disease, and proper sanitation.

The possibility of disease is always present — especially with each new calf that comes in. Occasional inspections are made by a veterinarian. However, every animal is checked front and rear every day for any signs of sickness.

Diseases

The diseases that occur most frequently are pneumonia, shipping fever, septicemia and such disorders as scours (bacterial and nutritional), and colds.

Occasionally a calf will get hurt if the wooden floor slats of a stall give way. The slats eventually do get weak from the effects of disinfectant, washing, manure and urine.

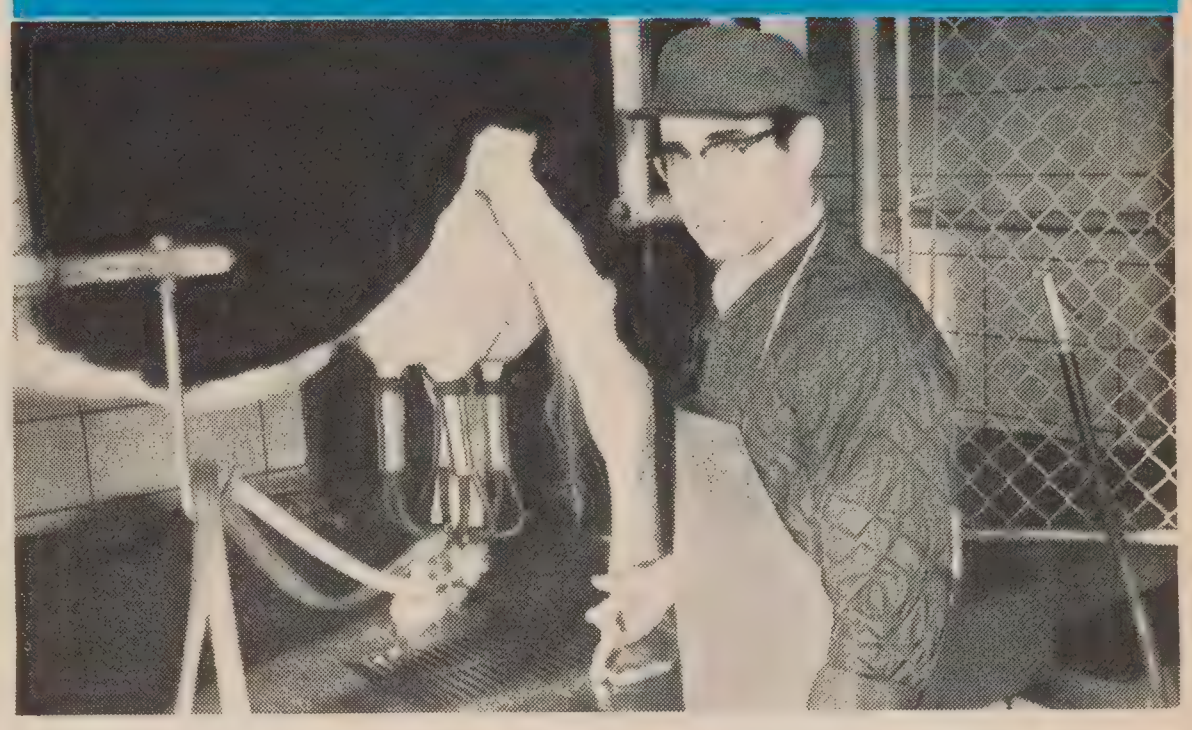
Good sanitation is one of the best preventatives for disease spread. After calves are moved out, the stalls are steam-cleaned, as are walls and ceilings.

Bob says that a chemical company will be taking cultures from the ceiling of the converted dairy barn to determine what chemical will provide the best control against spread of disease.

He points out that he tries not to put young calves in with older calves. One reason he likes to keep some animals in the box stalls is to serve as replacements for calves of similar age when needed.

"Milk Production Has Increased Steadily Since Using BOU-MATIC!"

Writes JAY SLOAN, Herdsman for TROYER'S FARM DAIRY, Union City, Pennsylvania

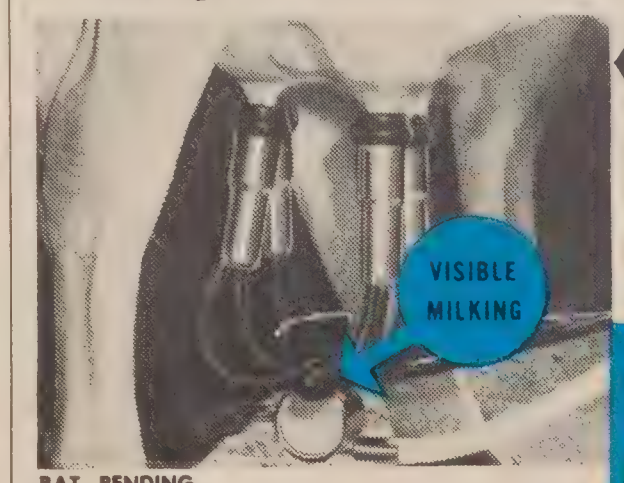


Read JAY SLOAN'S Letter—

"All my life I have milked in a.....milking parlor. I thought we were doing a real good job, but when we ran a Milk Quality Test on the entire herd we found a high percentage of the cows showed a high leucocyte count. The cows were uneasy and hard to get into the parlor. Since changing to Bou-Matic our cows come into the parlor better, let their milk down much faster, milk out more even with very little stripping, leaving the udder soft and pliable. On another Milk Quality Test ran 45 days after installing Bou-Matic Milkers the number of high leucocyte cows was decreased 30% and our production has increased steadily. It is a pleasant experience for the cow and the man to milk with gentle Bou-Matic!"

Jay Sloan

These BOU·MATIC Features Can Help You Enjoy BETTER RESULTS!



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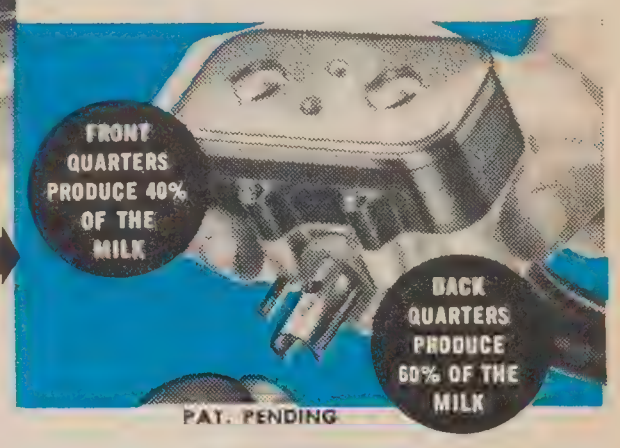
VISI-CLAW lets you see when milk flow stops for prompt removal of teat cups. Helps prevent over-milking. Reduces irritation.

ALTERNATOR PULSATOR milks front and back teats more evenly, reducing udder irritation.



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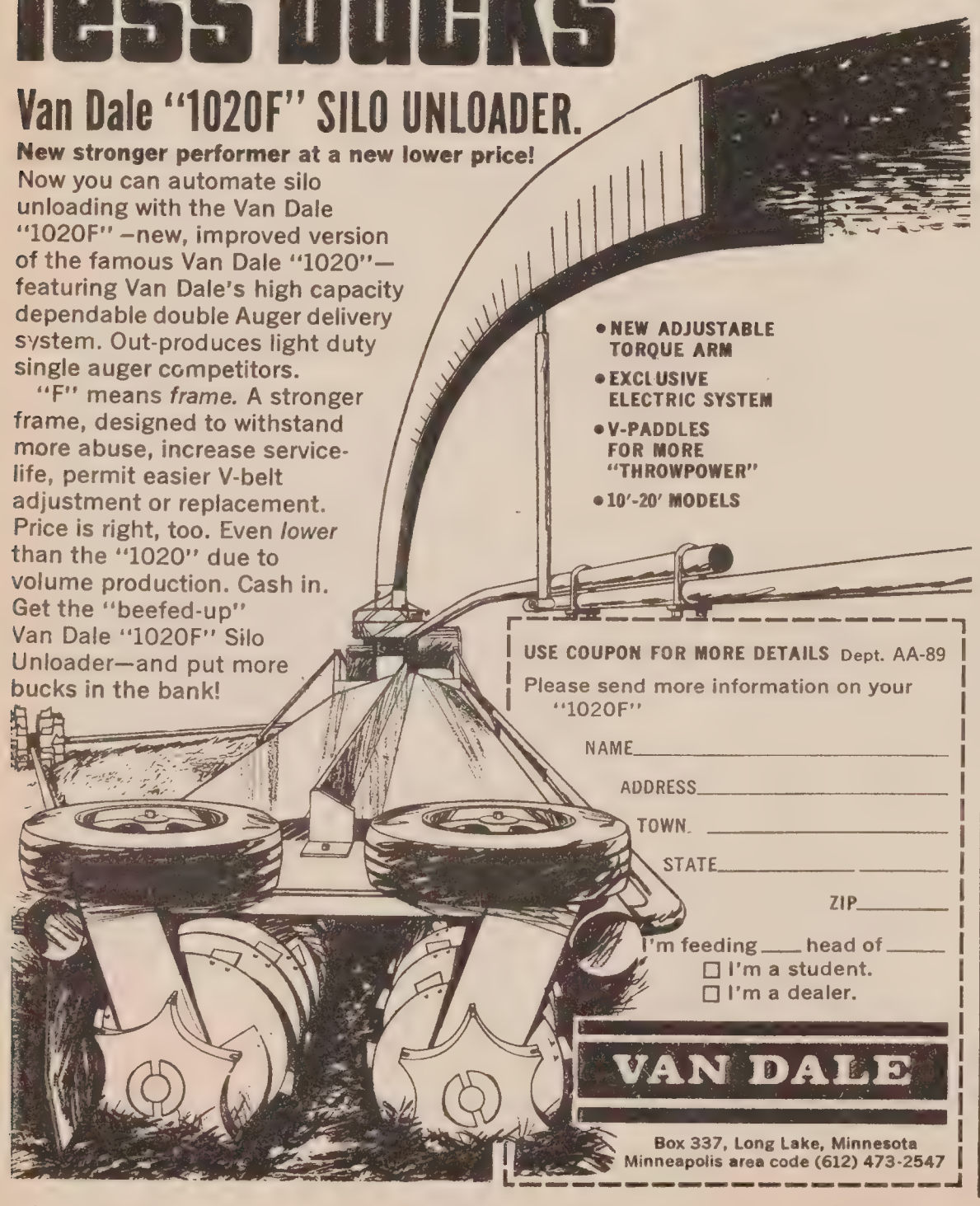
Van Dale "1020F" SILO UNLOADER.

New stronger performer at a new lower price!

Now you can automate silo unloading with the Van Dale "1020F"—new, improved version of the famous Van Dale "1020"—featuring Van Dale's high capacity dependable double Auger delivery system. Out-produces light duty single auger competitors.

"F" means *frame.* A stronger frame, designed to withstand more abuse, increase service-life, permit easier V-belt adjustment or replacement. Price is right, too. Even *lower* than the "1020" due to volume production. Cash in. Get the "beefed-up" Van Dale "1020F" Silo Unloader—and put more bucks in the bank!



USE COUPON FOR MORE DETAILS Dept. AA-89

Please send more information on your "1020F"

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I'm feeding____ head of____

☐ I'm a student.

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VAN DALE

Box 337, Long Lake, Minnesota
Minneapolis area code (612) 473-2547

Dollar Guide

For The Northeast Farmer

"PRICING SYSTEMS FOR EGGS" (MRR-850) is title of new report done as a result of major study by USDA and various colleges of agriculture. Single copies free by writing to Press Service, Office of Information, USDA, Washington, D.C. 20250.

BUTTERFAT TEST may change when cows are fed green-chopped corn. Feed both silage and green-chopped corn for a while before going completely to green-chop. Hay available free choice can also help keep test up.

NEW ALFALFA variety named "Team" is a vigorous grower, and is reported to have more resistance to alfalfa weevil than presently-used varieties. Seed not yet available for general use in the Northeast.

U.S. APPLE PRODUCTION "guesstimated" at 153 million bushels in 1969 by National Apple Institute ... compared to 128 million in 1968. Nine northeastern states expected to produce 42 million bushels compared to 1968's 38 million.

POTATO GROWERS in Pennsylvania have turned down a proposition to assess themselves one cent per cwt. of spuds ... funds to be used for potato research, advertising and promotion. Only 186 of 792 growers voted, with 99 opposed and 87 in favor.

Earlier, Keystone State peach growers had voted down a similar proposal.

Pennsylvania dairymen held public hearing July 15 on proposal to assess producers for similar fund for milk.

PESTICIDE REGULATIONS are almost certain to become more stringent. At least three national committees are involved in studying the long-run effects of persistent pesticides. Farmers can't afford to be careless with these chemicals ... on their own personal behalf, and because of possible public relations problem with non-farmers.

POULTRY SURVEY COMMITTEE predicts: Turkey supplies in July-December of 1969 will be 3 percent lower than in same period of 1968.

Egg prices to U.S. poultrymen in the 12 months beginning July 1, 1969 are likely to average 4 cents below the preceding 12 months.

The hatch of egg-type chicks in the last half of '69 is expected to be 5 to 7 percent above the same period last year. Hatch during January-May this year was only 1 percent above same period in '68.

DEBEAKING PULLETS when they're six to nine days old is a new technique recommended to New Hampshire poultrymen. After doing several million pullets, industry specialists report complete satisfaction with the method. It's a precision job, though, and has to be done exactly right. Age of chick, size of hole in the debeaker, and cauterizing time are among critical factors.

MILK INGREDIENTS used in filled milk must be priced at Class I (fluid) price, according to recent recommended decision of USDA. Requests made by nation's milk co-ops at Memphis hearing were followed completely in decision.

BEEF CATTLEMEN are happy about apparent good price prospects for their product. Holding cattle to heavier weights could wreck these rosy prospects, though.

FARM PRODUCTION in U.S. hit all-time high in 1968 ... with less labor than ever. Get details from "Changes in Farm Production and Efficiency" (SB-233). Single copies free from Office of Information, USDA, Washington, D.C. 20250.

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Here it is. The MF 880 automatic self reset plow. The heavy-duty semi-mounted plow for non-stop work in rough fields. 30″ of clearance under beam handles heavy trash flow. And if a bottom hits a stone or other object, it automatically swings upward to clear—as much as 17″. . . and automatically resets hydraulically. No other reset plow offers more trip clearance.

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MF's new 880 reset plow comes in 4 to 8 bottom sizes to fit larger farms and larger tractors.

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Massey-Ferguson Inc., Des Moines, Iowa.

MINIMUM FARM WAGES

by C. Kenneth Bullock

BEGINNING next October 1, New York farmers who employ substantial amounts of labor will be covered by a minimum wage law passed during the 1969 legislative session and signed by Governor Rockefeller.

Proposals have been advanced by various interests for many years to cover farm workers with minimum wages. Such proposals were successfully resisted by farmers and their organizations until certain specified provisions were included.

Provisions

Among these provisions are those that would not place New York farmers at a disadvantage with those farmers in other areas of the United States producing similar commodities to those produced in New York and with which New York has to compete in the market place; recognition that employment and work conditions on farms are different from industrial and factory employment; and provisions which would permit the continuation of piecework which is historical on New York farms.

To discontinue piecework would deny employment to many youth, elderly and handicapped who now perform farm work at their own pace, which may be more leisurely than the average able-bodied worker. Piecework is also advantageous to the exceptionally good worker because it permits him to earn a higher daily wage than the average worker.

The following questions and answers outline some of the more important provisions of New York's new minimum wage law affecting farm employers.

When does the law become effective, and to whom does it apply?

It goes into effect October 1, 1969 and applies to employers of farm workers with an aggregate cash payroll of $1,200 or more during the calendar year 1968. Beginning February 1, 1970 and each February 1 thereafter, it applies until the next January 31 to such farm employers who had a cash payroll of $1,200 or more during the previous calendar year.

What are the minimum wage rates provided in the law?

They are $1.40 per hour from October 1, 1969 to January 31, 1971; from February 1, 1971 and thereafter they are $1.50 per hour.

To meet the above minimums may perquisites in addition to cash be considered?

Yes, the law states that wages may include allowances "for meals, lodging and other items, service and facilities when furnished by the employer to his employees." Such allowances are to be permitted under regulations issued by the Commissioner of Labor.

What employees are covered by the minimum farm wage law?

All persons performing farm work for a covered (as described above) private employer except members of an employer's own family and except a person under 17 years of age who is employed as a hand harvest worker on the same farm as his parent and is paid on the same piece-rate basis as those over 17. Workers supplied by what is generally known as a farm labor contractor are covered. Domestic workers are not included.

What constitutes hours worked?

It includes all hours at farm jobs including time going from field to field and waiting for baskets and the like. It does not include time not worked because of weather conditions.

Is the minimum farm wage law a separate section of the state's labor laws?

Yes, at the behest of farmers and their organizations, the Legislature determined that farm employment is quite different from industrial employment and that industrial minimum wage laws could not properly be made effective for farm workers.

The preamble to the new law states that establishing minimum wages for farm workers "involves distinct and unusual problems"; that farm workers are employed in various ways other than on an hourly basis such as "on a piecework, weekly, monthly or other basis; and that the agricultural industry is particularly affected by weather and market conditions and by perishability of products. Accordingly, the Legislature further declares that it is the purpose of this act to provide a flexible approach with full consideration of the unusual problems involved."

How is this flexible approach obtained?

By not spelling out in the law hard and fast rules for its administration, but by establishing an "Advisory Council on minimum wage standards for farm workers" with whom the Commissioner of Labor shall consult and receive recommendations before promulgating regulations from time to time. Public hearings with due notice are required before issuing regulations.

How is the Advisory Council constituted?

It is appointed by the Commissioner on a continuing basis and is made up of eleven members, five of whom shall represent the interests of farmers; five the interests of farm employees and the public; and one who shall act as impartial chairman.

Are there provisions for appeals from regulations and orders?

Yes, the law provides in detail the manner in which employer organizations, labor organizations and individuals may appeal.

What records are employers required to keep under this law?

The law states that employers shall keep true and accurate records of hours worked by each employee, the wages paid, and such other information as the Commissioner deems material and necessary, and that such records shall be open for inspection by the Commissioner at any reasonable time.

What are penalties for violations of the law?

The law provides that infractions shall be considered misdemeanors and that those convicted shall be subject to a fine of between $50 and $500. Among the infractions covered are: discrimination against an employee . . . by discharge or otherwise . . . who has made a complaint or testified in an investigation that he is not being paid in accordance with the law; not paying wages applicable; and failing to keep required records.

The infraction of not paying applicable minimum wages is also subject to imprisonment of from 10 to 90 days in addition to the fine. Each day of failure to keep records is a separate infraction, as is failure to furnish records to the Commissioner upon request.

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LOW-FAT BLUES

Extension Dairyman Lynn Brown of the University of Connecticut reports that several dietary conditions may affect butterfat tests in dairy cattle:

1. **Level and type of dietary fiber** – Under most conditions, the minimum amount of fiber appears to be 17 percent of the total dry matter of the ration. When feed averages less than that, low-fat test problems frequently occur.

Since pasture is becoming relatively less important to feeding dairy cattle, it is less likely to be causing low-fat test than was once the case. However, chopped green corn in August and September has been involved in many cases of low-test milk.

The maturity and dry matter content do not seem to be as important as whether the material has been ensiled. On many farms the problem of fat depression has persisted as long as fresh chopped corn was fed, but disappeared soon after the feeding of thoroughly-cured corn silage began.

If a check of the fiber-feeding level shows it to be low, review grain feeding practices . . . too much grain in proportion to roughage can depress butterfat test. Challenge feeding has been a good practice, but some dairymen do not reduce the amount of grain after the peak of lactation; this is a mistake. A cow early in her lactation may need a pound of grain for two pounds of milk, but by the end of the lactation she may need only one pound of grain for five pounds of milk.

2. **Concentrate preparation and ingredients** – Cooked starches like bread, rice, potatoes and corn have an adverse effect on fat test. Cows consuming pelleted corn will produce lower-fat milk than cows consuming ground corn.

Pelleting a concentrate mixture will decrease fat test by .1 to .2 percentage points. However, if the mixture is high in corn or certain other starches, the decrease may be considerably greater. If fat test has been a problem, the pelleted grain mixture should be less than 35 percent corn.

3. **Forage characteristics** – Numerous researchers have suggested that the feeding of 1.5 pounds of hay equivalent per 100 pounds of body weight will prevent fat test problems. Our field observations indicate that even two pounds is not adequate **in some cases.**

Poorer-quality forages tend to maintain fat test better than good quality forage. This does **not** mean that you should strive for poor quality forage; good forage will produce more milk! However, if you are having a fat test problem, feeding some poorer quality forage may be helpful.

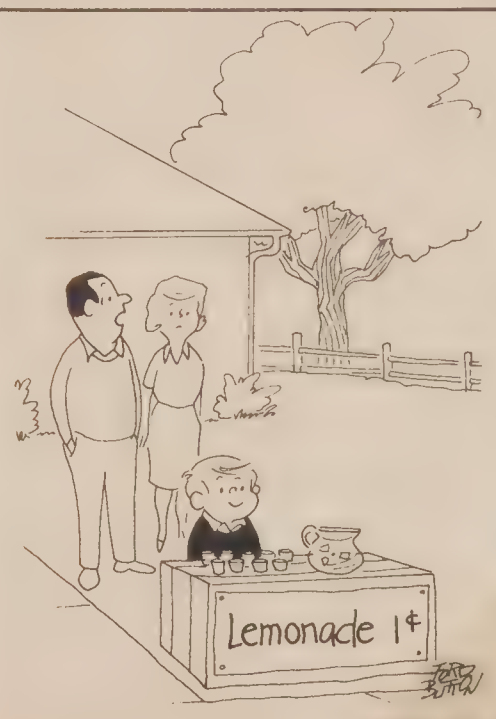
4. **Imbalanced feeding** – Inadequate protein has been involved in fat test problems. Dairymen sometimes feed more grain than required in the hope that this will take care of protein needs. In most of these cases they are supplying the calculated amount of protein required, but cows are receiving more energy than needed.

In other words, there is an **imbalance** of energy and protein. Many herds have responded to protein supplementation with increased fat tests. There is also limited evidence to indicate mineral deficiencies and/or mineral imbalances causing fat test problems.

Check to see that the cows are receiving enough protein. For a good thumb rule, 13 percent of the dry matter should be protein.

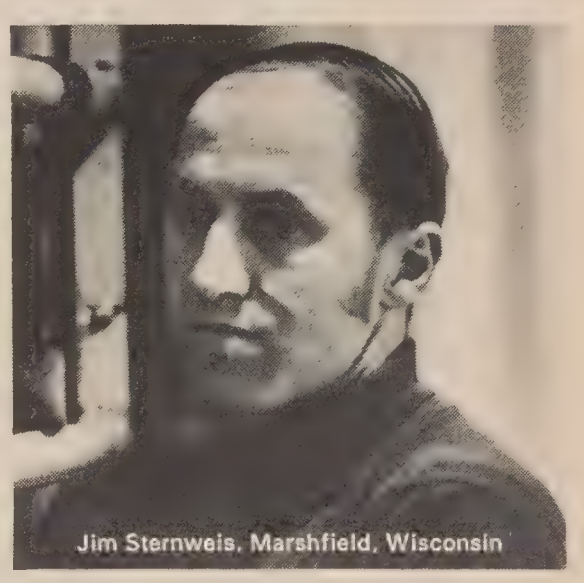
5. **Alkaline salts** – If a cow consumes 0.8 pound of sodium bicarbonate and/or 0.4 pound of magnesium oxide daily on a diet that has caused low-fat milk, there will be an improvement in fat test. However, it is quite unlikely that the test will return to normal.

Furthermore, bicarbonate is somewhat unpalatable, so it is not practical to mix it into the feed at this level. These materials add cost to the ration, but add no energy. They may be helpful in some cases, but would not seem to be the most effective way to solve a fat test problem.



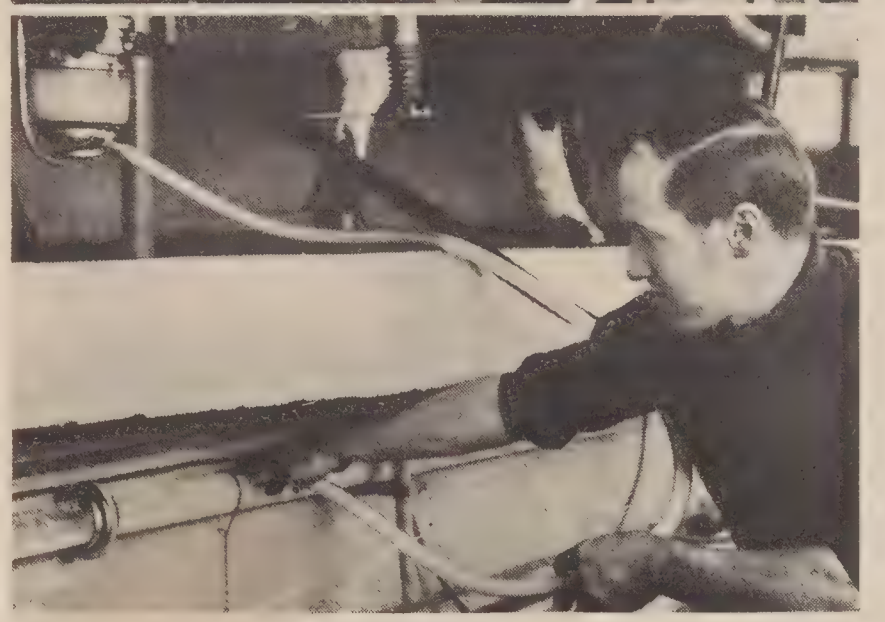
"It's a good lesson in government. You subsidize him with sugar and lemons and I'll buy the surplus."

"Planning ahead... and Surge Equipment are helping to build our future."


Jim Sternweis, Marshfield, Wisconsin

"Three years ago, we decided free stall housing and a milking parlor were essential for a modern dairy system. With planning help from my Surge Dealer we started on a complete 150-cow environmental system including insulated free stall barn, with an efficient Surge Picture Window Milking Parlor, liquid manure handling, a sealed silo and automated feeding bunk. This modernization has led to a herd increase from 50 cows to 80 cows."

The Sternweis herd is housed loosely in free stalls, and fed 75-80% haylage with silage from mature corn harvested after freezing. Cows also receive grain in the milking parlor. A single feed bunk is filled from a suspended conveyor system which lets the bunk double for baled hay when desired. The liquid manure pit measures 32' by 100' by 10½' deep and holds waste from the entire herd for four months without emptying.



Right now, it is a one man operation (with help from the family) but Sternweis believes his system will easily support two men at full 150-cow capacity...and can be easily expanded even more. The long range plan has "built-in" allowance for future growth of the operation.

TAKE THE HARD WORK OUT OF DAIRYING...The Surge Randel Support holds the breaker cup in position for efficient milking. It helps take the hard work out of dairying...results in easier hours of work. Mrs. Sternweis can start milking alone when field work on their 400 acres makes it necessary. Comparing the present system with his old stanchion barn, Sternweis figures he will be able to handle 100 cows in fewer hours than he formerly spent on 50.

IMPROVING HERD HEALTH is a goal of every dairyman. Mr. Sternweis feels the Surge low line system and balanced tug and pull milking action of Surge are important contributions to herd health. Only 2 or 3 cows per year are being culled for udder problems from his present herd of 80 cows. The result is fewer replacements . . . and an older herd. Both factors help build efficiency and production.

The next step in the Sternweis growth plan is to slowly increase herd size to 120 cows over the next three years. His old stanchion barn will be remodeled to handle 75 heifers in free stalls. His feed bunk and conveyor system extend into the old barn. The manure handling system has the built-in capacity to handle the expanded herd. It's this kind of planning ahead that is helping to build a future for Jim Sternweis and his family. He feels the modernization plan is helping to keep his boys interested in agri-business and in dairying...and that's good for everybody's future!

Now is a good time to call your SURGE Dealer and start planning for YOUR future. He can tell you about your neighbors who are saving labor, cutting costs, and increasing profits with Surge Planning and Surge Equipment. Call him today, or drop a line asking for more information to Babson Bros. Co., 2100 South York Road, Oak Brook, Illinois 60521 or Babson Bros. Co., Ltd., 1025 Rangeview Road, Port Credit, Ontario, Canada.

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One of the farms that lies in the Charlotte Valley is owned by Milton Brandon, Schenevus, New York.

ONE DAM PROBLEM AFTER ANOTHER!

The people of the Charlotte Valley in the town of Davenport (Delaware County), New York, are again in the line of fire! The Corps of Army Engineers and the Department of Water Resources of New York State are out to take 3150 acres, consisting of three villages and hundreds of acres of river bottom flatland to build a multi-purpose dam.

We, the people in the Charlotte Valley and surrounding area, feel we are being done a grave injustice.

In 1936 (34 years ago), there was a flash flood in our area which did a great deal of damage to the city of Binghamton. At that time, there was proposed a dam to be built in the Charlotte Valley to prevent this from ever happening again.

Opposition

The people of the Charlotte Valley bitterly opposed this dam at that time and the proposal never got very far. The Corps of Army Engineers does not like to be put down, and so for 34 years they brought this up time and time again. The people of our community traveled to Washington twice to testify and each time were successful in stalling the project.

In the meantime, the city of Binghamton built flood walls to protect their city, and two flood control dams were built . . . one at Whitney Point, and one at East Sidney. These projects gave us more reason to feel that we were justified in our actions to fight to keep our valley

Prosperous

Also, during these 34 years, agriculture prospered in our valley. In a report to Governor Rockefeller from the Commission on the Preservation of Agricultural Land, our valley was pointed out to be one of the most productive valleys in New York State.

Because of the inability of the Corps of Army Engineers to justify this project, the Department of Water Resources of New York State became involved.

At this time, we must seriously question the intentions of the Department of Water Resources. On one hand we have one government agency trying to build a dam for flood control already provided, and on the other hand a Commission appointed by Governor Rockefeller stating that "penetration of such valuable farmland could jeopardize the agricultural industry of New York State."

To justify the project on paper, they included recreation and low-flow augmentation. It is absurd to think we must be asked to give up our homes, businesses and farms with a stable, year-around economy for a hypothetical seasonal economy. It is sheer fabrication of the facts.

Sewage Problem

As far as low-flow augmentation is concerned, this is simply to keep the sewerage from the city of Binghamton moving or diluted through low water per-

(Continued on next page)

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Farm Enterprise Service is the broad group of farm information and business-related services developed by Agway to meet the needs of members in areas of decision-making: how to make the best use of land, capital, labor; which varieties to plant; what chemicals to use; what are the least-cost routes to profitable feeding; what to build; how and when to automate.

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See Agway services for tomorrow's farms

Empire Farm Days, August 5-7, Avon, N.Y.
New York State Fair, August 26-Sept. 1, Syracuse, N.Y.
Agricultural Progress Days, August 26-28, Bradford City, Pa.
Eastern States Expo, Sept. 13-21, W. Springfield, Mass.

iods. Binghamton is currently at primary treatment stage and is projected to go to 85 percent treatment.

If the city of Binghamton would go to 95 percent treatment, there would be no need for low-flow augmentation. So, we contend that it is the duty of the city of Binghamton to go to 95 percent treatment and not our responsibility. To provide the water to dilute the sewerage is not the answer to the problem.

We certainly don't want anyone to feel that we are not concerned about the problems that have been mentioned in this article. Therefore, we offer a constructive alternate plan for flood control and recreation. This plan would not only benefit us locally, but benefit all of the people.

Small Dams

We contend that small dams built on the feed streams to the Charlotte River would provide flood control and recreation, and at the same time leave the entire valley intact. The theory behind such a program is to catch the water where it falls and hold it there to prevent excessive run-off. This type of program would also replenish our streams in times of drought, because the proper place to store water is in the soil and not in large, open reservoirs.

The water situation in New York State has become increasingly more critical each year and the quality has become progressively worse. Our program would tend to much improve both of these problems, coupled with flood control and recreation.

Dam Series

We realize that a series of small dams would not provide the same amount of flood protection as a large dam. However, with the two flood control dams now in existence, and the flood retaining walls at Binghamton, these would be sufficient.

It is hard for us to comprehend the apparent lack of consideration for the human sacrifice involved, to say nothing of the financial loss of those directly involved and the squandering of public money at a time when taxes are becoming almost unbearable.

We contend that the state in its activities should intefere as little as possible in the private lives of the individual whom it has encouraged to settle within its boundaries. Many of the citizens in the area of the proposed project have fought in the wars of our country to continue the freedom for establishing homes, businesses and community ties . . . the state is not giving due consideration to these individual rights as guaranteed by our Constitution.

It is on the basis of what you have read in this article that we are determined to stop this project and other projects of this nature.

And to think that this all started with one flash flood in 1936! —Ray Christensen, Chairman of Town Planning Board, Davenport, New York

BACK TO THE LAND

Farmers, and processors of farm products, are finding that the waste materials generated by their operations generally can be returned to the land with less hazard to the environment than when discharged into streams.

The biggest problem in returning agricultural wastes to the land is in distributing the materials widely and evenly enough to permit adequate breakdown and absorption into the disposal site. Of the various methods of distribution that have been found, spray irrigation appears to be the best.

Five years of successful operation of a system of spray irrigation for disposal of sewage effluents on both cropland and woodland at Pennsylvania State University may show the way for other communities.

Spraying was done by overhead sprinklers at an application rate of 2 inches per week. Growth of both clover and woodland was increased. Very important was that there was no odor at any time.

Similar operations have begun in Illinois, Ohio, Oregon, Texas, Nebraska, and Puerto Rico.

The main principle behind this type of operation is that of getting materials from the land back into the land where they can be used again in production.

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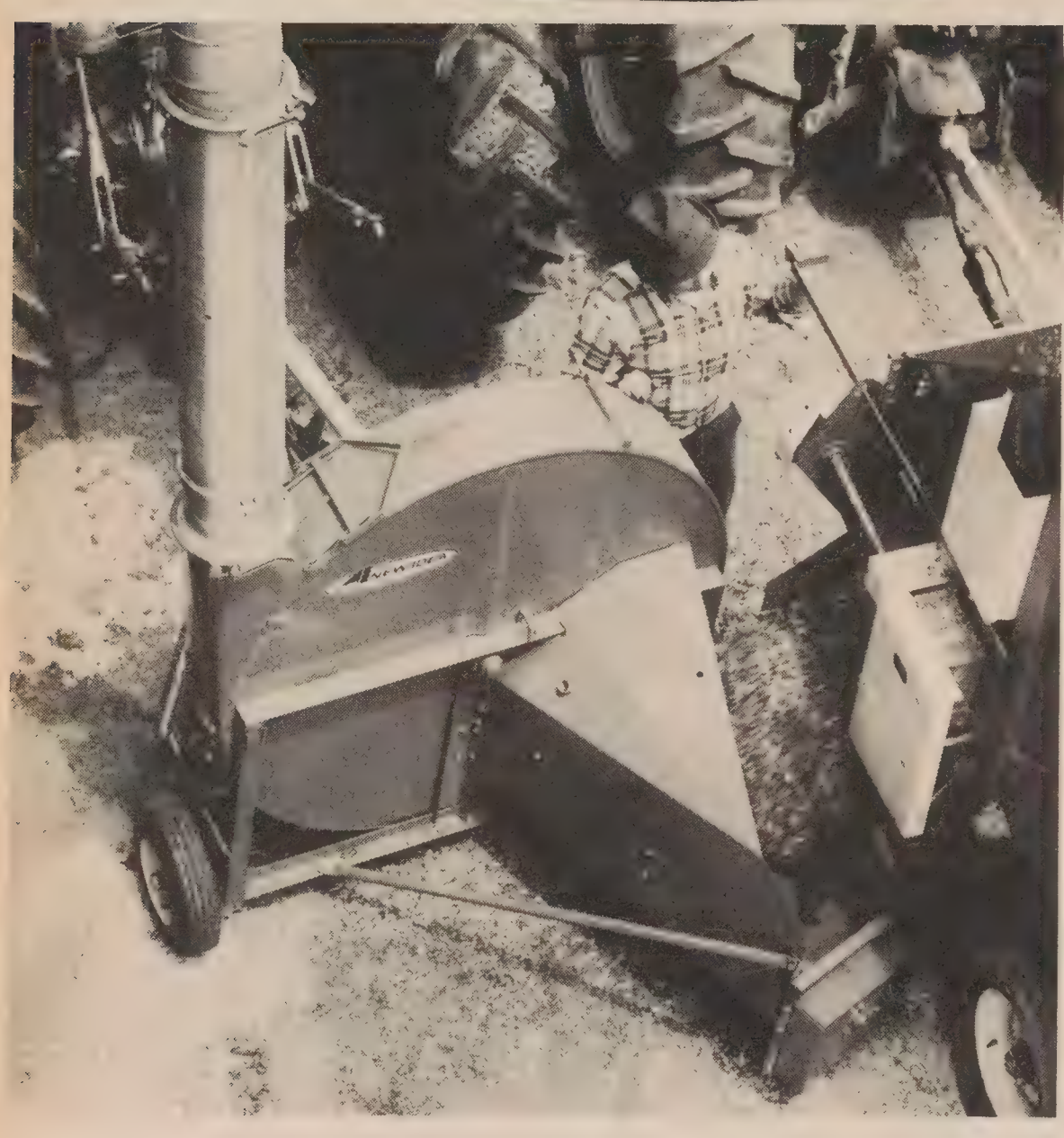

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A YEAR OF CHANGE

by Amos Kirby
New Jersey Editor

THE year 1969 may long be remembered as the "Year of Change" in New Jersey. The scarcity of labor, higher wages required under state laws, and lower prices on crops in many instances have caused some dramatic changes in farming practices. Here are a few of the changes that this columnist has observed in his travels around New Jersey and Delaware.

ASPARAGUS HARVESTER

Although New Jersey and Delaware may have lost upwards of 5,000 acres of asparagus due to a shortage of harvest workers, the mechanical harvesters (when available and used) solved the problem. Normally, it requires up to three men to harvest five acres. This year there was hardly one man to 10-15 acres, and large blocks were never harvested.

The most spectacular illustration of what a harvester will do was on land owned by the Draper-King Cole Canning Co. at Milton. They have about 1,400 acres of asparagus growing on their own farms. This year, 14 tractor drivers and 14 Porterway harvesters handled the entire crop; not one acre was lost!

Two other Delaware growers with over 5,000 acres on their own farms, and some under contract with other growers, were unable to get sufficient help to cut much more than 50 percent of their acreage.

A bottleneck has existed in the machine-harvesting of asparagus. Asparagus harvested in this manner falls in pallets in what might best be called a jumble pack.

It is the writer's opinion, based on engineering research in one plant, that a system has been developed which has greatly reduced the cost of processing. When this problem is fully solved, asparagus has become another mechanized crop.

WEED CONTROLS

New chemicals and new machines are solving the weed problem in many field crops. An ingenious grower with a flair for mechanics developed a weed sprayer that covers up to 100 acres in a 10-hour day.

This tractor looks like a mulepack headed for the mountains by a prospector. In addition to controls for operating the tractor, other controls lift the long booms from the driver's seat when turning. Lights have been installed to enable the operator to see at night every nozzle on the sprayer, as well as what lies ahead in the machine's path.

At the rear of this special machine is an attachment for a 14-foot disc harrow that mixes the chemical in the soil at the proper depth. When discing in the chemical, only 50-60 acres may be covered in a normal day.

In Delaware, the writer also saw a homemade weed sprayer with a 55-foot boom used on asparagus. In a 100-acre field, I could hardly find even one weed of a persistent type. As proof of the efficiency of this sprayer, there was one row that had been missed . . . due probably to a closed nozzle . . . where the weeds were 15 inches high, and unless removed by hand, could attain a height of 6 feet. Tens of thousands of acres of soybeans in New Jersey and Delaware have been properly sprayed for weed control and are as clean as a hound's tooth.

CONCENTRATED SPRAYS

Concentrated sprays are reducing the cost of spraying apple and peach orchards. By using the same amount of active ingredient per acre as before . . . but far less water . . . growers are able to cover at least three times as many trees without reloading the sprayer. One sprayer, if provided with supplemental tanks of water, can replace two of the conventional types.

Another special helper in the orchards enables growers to determine if the spray is actually reaching the top of the trees. This is an aluminum pole to which pieces of a special paper are attached.

By holding this at the side of a tree, one can determine by the spray particles on the paper how high the material is actually hitting the foliage. Under the old hit-or-miss method, growers were only guessing how good a job they were doing.

TOMATO SEEDER

A special machine has been developed that enables tomato growers to seed direct in the field and eliminate the purchase and transplanting of southern plants. This machine applies a weed killer to the soil, and at the same time applies a plastic covering to speed up germination and ward off late spring frosts.

The seed is sown in a four-inch trench and when covered with the plastic, sufficient heat is accumulated to speed up the germination and when danger of frost is past, the plastic is removed and the plants may be thinned to the proper distance. When perfected, this machine will revolutionize the planting of tomatoes for processing.

LETTUCE TO P.R.

New Jersey lettuce growers have found Puerto Rico to be a new market for their highly

(Continued on next page)

perishable crop. Shipping is in a conventional trailer with a refrigerated body that provides fresh delivery in more distant markets.

The lettuce is packed in standard boxes. It is then vacuum-cooled and . . . together with a special nitrogen cooling unit . . . is loaded on ship at New York on a Thursday and arrives in Puerto Rico on Monday. The last shipment was as fresh as the day it was cut on the farm at Cedarville!

MEXICAN-AMERICAN WORKERS

The introduction of sugarbeets as a new crop in the South Jersey area may open up a new supply of workers for fruit and vegetable farms.

What appeals to growers who have used the Mexican-American workers is their speed in thinning and weeding beets. It may be the contract system of payment that provides the incentive for getting the job done. Regardless of the reason, 1970 may see more workers from Texas showing up in the Northeast.

MALT BARLEY MARKET

If one grows barley and is looking for a new market, take a peep at the possibilities of tschermak, a variety for malting. Some South Jersey growers have found the malt market a profitable outlet.

To expand this market, growers in New Jersey, Pennsylvania, Delaware and Maryland have set up a four-state steering committee to develop a program under which more growers produce for nearby markets.

GREEN-CHOP

Green-chop feed for dairy cows has its feeding advantages over hay-crop silage, reports Penn State dairy specialist Dick Adams.

Based on a three-year study, hay-silage diets result in problems that are usually remedied by feeding green-chop:

1. Vitamin levels diminish during storage, especially A and E.

2. Cows eating lots of fresh forage may consume as much as ten times their daily needs of vitamin A. This surplus is not lost, but is stored in the liver and can be re-introduced into the system when needed.

3. Dry-lot fatigue, sometimes called "the stale cow syndrome," may appear with hay-silage diets. The cows don't reach their usual height of production, in spite of otherwise good feeding.

4. All dairy cows, reports Adams, should be provided with good forage as pasture or green-chop for a period of at least four to six weeks each year. Best times are mid-spring or early fall, or both. At least one-half of the hay equivalent should come from fresh forage during this period.

MARKETING PROGRAM

New Jersey Certified Farm Markets, Inc., has set up a new system for supplying its members with quality merchandise. It started off with the delivery of plastic-house tomatoes, and has been extended to other fruits and vegetables.

Working through a broker at Vineland, certified markets in the northern part of the state can order direct through a coordinator in the Farm Bureau and have highest-quality produce delivered to their markets.

Participants chipped in $15,000 to finance the deal. Only certified markets are participating. Sweet corn, tomatoes, peaches and other items grown in the lower part of the state are used prior to the maturing of local supplies.

Idea was tried in 1968 and market operators liked what happened. This year, they supported the program with their pocketbooks.

ALFALFA

If 1969 results with control of the alfalfa weevil are permanent, the "queen of forage crops" will stage a comeback in New Jersey.

Credit for the almost total absence of the weevil this spring goes to the importation of parasitic wasps from Europe about 10 years ago. After a decade of breeding and distribution, the wasp is now looked upon as being able to almost eliminate the weevil . . . or at least bring it down to the point where it is no longer an economic problem.

Dr. Stuart Rice, entomologist at the Agricultural College, does not want to see the weevil completely eliminated. If that happened, the wasps would starve!

HORIZONTAL SILO

Building a trench or bunker silo this year? The experience of many New Jersey dairymen is that a concrete floor will be an excellent investment. At the same time, seed down the banks to hold the dirt in place.

With a concrete floor, there is little trouble from the truck being mired in the mud after rains and melting snow. The seeded banks will prevent the soil from sliding down during these rain or thaw periods. Ryegrass is a quick-germinating cover plant, and has a root-building habit that holds the dirt in place.

SHADE FOR COWS

Artificial shade for dairy cows is being recommended by the College of Agriculture at Rutgers.

Cows need shade when temperatures go to 80-90 degrees. If no trees or other shade is available, artificial shades may be made from aluminum sheets. Paint them white on top. Artificial shades should:

1. Be between 6 to 8 feet above the ground. Erect the higher side toward the north and lower toward the south.

2. Provide at least 40 square feet of space per cow.

3. Be located away from buildings.

A simple, low-cost shade can be made from a cable suspension of snow fence, canvas or woven plastic fiber hung from four or more upright poles.

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PATIOS

PATIOS offer exciting possibilities for outdoor living. You'll find that they are not only a convenience, but that they also often add an extra room to the house.

To build a concrete patio, mark off the area and remove the sod and soil to the depth desired. Most patios are formed with 2×4 wood forms. For circular borders, drive stakes. By nailing plywood strips together, an arc is formed and can be held in place by outside stakes.

Dividers

If you want to leave dividers in the concrete, use redwood strips or treated lumber placed to give the desired patterns. Where this is done, you will want to protect the appearance of dividers by covering the top edge with masking tape before the concrete is placed. To prevent the wood dividers from "working up" as frost moves the patio slabs . . . and then staying up as slabs drop back . . . drill holes in the dividers when placing them, and insert ½-inch rods so they will protrude into concrete on both sides of the divider. This not only holds the dividers in place, but also strengthens the overall patio structure.

Set the forms with a slight pitch to keep water away from the house, and to aid water run-off when you hose down the patio area. Be sure that all forms are tightly braced before the concrete is delivered. It is important also to have the proper finishing tools and enough labor on hand. If you have never finished concrete before, consider hiring a concrete finisher so that your patio will have that professional-craftsman look.

When the concrete is delivered, spade it well into the corners of the forms. Overfill the forms slightly, then screed with a straight edge. Screeding merely levels the concrete with the top of the forms; don't try to use the screed to get a smooth surface.

Finishing

Check the concrete frequently to determine if it is ready for finishing. Concrete should stand for 30 to 45 minutes (until it begins to stiffen) before finishing operations should be attempted. Wood floating will leave the concrete surface with a rough texture. Steel troweling will give a dense, smooth finish.

Finally, don't forget to cure the concrete. **Curing is one of the most important construction operations, but it is also one of the most neglected.** Concrete should be moist-cured for at least five days.

For more information on concrete uses of all kinds, write Dept. AA, Portland Cement Association, Old Orchard Road, Skokie, Illinois 60076.

Remove sod.

Set forms to proper grade.

Place sand to a depth of two inches.

Redwood forms covered with tape.

Concrete is placed.

Strike off concrete with a 2 × 4.

Work with wooden float.

Fine bristle broom gives texture

Plastic film seals for curing.

FEEDING HORSES

When it comes to feeding, it's possible to ruin a horse through kindness, warns Dr. Donald J. Balch, Extension livestock specialist at the University of Vermont.

Many horses are probably underfed, but some are overfed on grain. Many a horse has been "grain foundered" . . . or even foundered on grass, particularly ponies turned on lush pastures in the spring after a long winter on dry hay.

"Young horses can often handle a large amount of good-quality hay," says Balch. "However, the young horse needs a relatively high-protein diet, and this is often best supplied by feeding a good-quality grain ration."

Feeding mature horses is based largely on the amount of energy the horse is expending through such activities as racing, jumping, trail work, raising a foal, or other energy-using tasks. The amount of energy supplied in the ration will determine the level of performance and condition.

Following are Dr. Balch's rules of thumb for feeding horses:

1. One to two pounds of high-quality hay per 100 pounds of body weight.
2. Grain to keep the horse in good flesh, with greater amounts when the horse works more.
3. Trace mineral salt, either loose or block, available at all times.
4. Dicalcium phosphate, fed free choice.
5. Clean water, up to 15 gallons per day.
6. 16 percent crude protein in the grain ration, fed to growing, working, or lactating horses.
7. And **never** feed moldy or dusty hay to horses.

"Some horse owners do not realize the difference between good and poor hay for horses," Balch explains. "Good hay is indicated by leafiness, firmness of stem, absence of mold or dust, and greenness of color. Hay that has these qualities and was cut early in the season is high-quality hay."

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MILLER-HURST DAIRY FARM,
amdale, New York

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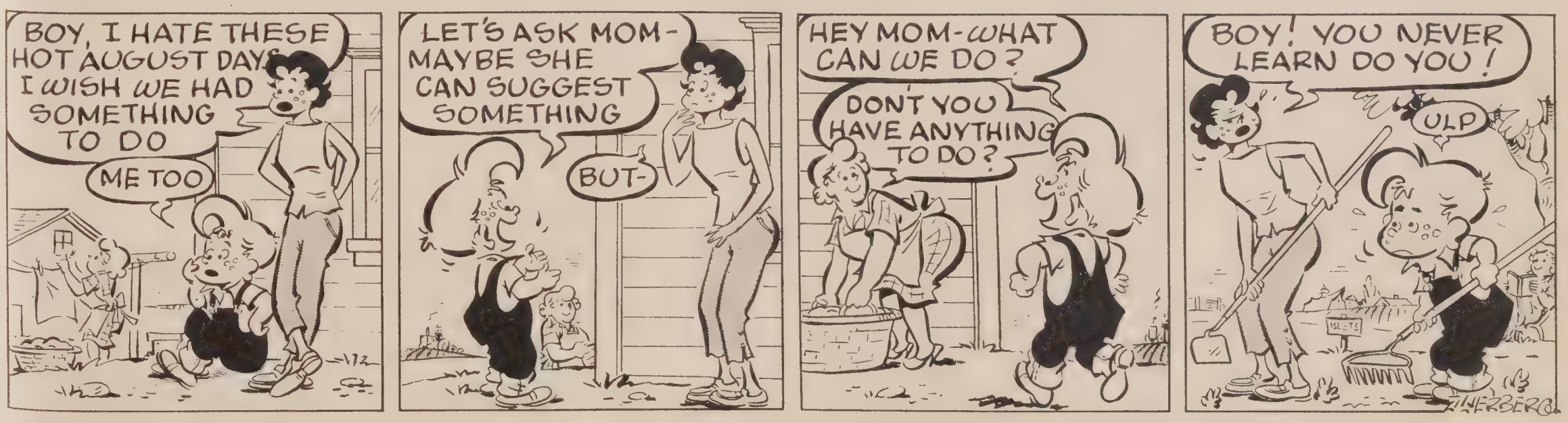

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NEARLY NEW HOMELITE 775G chain saw. Cost $365—sell $150. C. Loomis, Bainbridge, New York 13733.

INTERNATIONAL #550 HARVESTER with 2 row head—like new. Gehl Chop King with 2 row head. John Deere #12 with three heads. Corn heads—Gehl 3 row—narrow row, I. H. 2 row for #55. Gunther Heussmann, 5th St. Mountain, Emmaus, Pa. 18049. Phone: 215-965-5203.

NURSERY STOCK

STARK BRO'S BIG NEW 1970 Catalog free! Spectacular full-color display of Giant-size apples, peaches, nectarines (fuzzless peaches), pears, cherries, apricots, plums from Dwarf, Semi-Dwarf. standard size trees. Ornamentals, roses, etc. Stark Bro's., Dept. 30380, Louisiana, Missouri 63353.

1,000 NURSERY ITEMS—Usual and unusual trees, Shrubs, fruits, seedlings. Propagation supplies. Evergreen seeds, supplies, books, Catalog. Mellinger's, North Lima 42, Ohio.

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INTRODUCTORY OFFER — Color prints 10¢ each; 12 exposure Kodacolor $2.79 includes new film. Photos, Box 707 AA, Muncie, Indiana 47305.

KODACOLOR FILM DEVELOPED and Deluxe Jumbo Color Prints, 8 or 12 exposure $1.69. (Trial Offer with this ad.) American Studios, Dept. AA, La Crosse, Wis. 54601.

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STRAWBERRIES, RASPBERRIES, BLUEBERRIES, for fall planting. 70 small fruit varieties State inspected. Gala, Vesper, Frontenac, Catskill, Ozark Beauty and Geneva everbearing strawberries. Madawaska, Latham, Durham, Fallred raspberries. Fresh dug daily —April, May and Sept. 15 to Nov. 15. Send for free color catalog. Walter K. Morss & Son, Bradford, Mass. 01830.

REAL ESTATE

WRITE FOR YOUR COPY of our "Summer Special", it's brand new and free! Latest bargains in real estate; actual property photos. Safe-Buy Real Estate, P. O. Box 589-AG, Little Rock, Ark. 72203.

WOODLOT—231 acres Jefferson County. Good assortment. Full price $5,000.00. Call 1-457-3380, Chas. J. Graham, R.E., 114 N. Woodland Dr., Liverpool, New York.

TWO FAMILY HOUSE and concrete block barn on one acre. Retail bedding plant and produce business. One man operation in Village of Greenwich, Washington County, New York State. Fine for income or retirement home. Price $19,900. Contact owner Perry Kipp, Greenwich, New York 12834.

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WANTED—FARMS, ACREAGE, village and country homes, all other types of real estate and business opportunities, New York and Pennsylvania. W. W. Werts Real Estate, Johnson City, New York.

ACREAGE UNDER $100 per acre within two-hundred (200) miles of New York. Call or write Murray Keen, 5 Warnke Lane, Scarsdale, New York (914) 472-1080.

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SALESMEN WANTED — For Mineral Supplement, Fly Sprays, Udder Ointment, etc. Liberal commissions. Established business. W. D. Carpenter Co., 111 Irving Ave., Syracuse, N.Y. 13210.

DAIRY CATTLE SALESMAN. For large cattle firm. Eastern Pennsylvania territory, many established accounts. Commission and expense account. Call M. Barmann & Sons, Middletown, New York 10940. Tel: 914-343-6875.

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ONE OF OUR most popular services to readers is sponsoring and arranging tours and cruises. They are popular because the worries about foreign customs, handling baggage, value of foreign money, language barriers, tickets, reservations, etc., can be forgotten. Trained, experienced escorts take care of everything for you—even tipping. For details on our future tours, write American Agriculturist Tours, Box 370, Ithaca, N.Y. 14850.

FLORIDA KEYS FUN motel and marina on 50 sunny acres. Houseboat Rentals. Write for brochure. Plantation Harbor Motel, Box 26N, Islamorada, Florida 33036.

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TREES SICK? Inject Vita-Spike! Free Booklet. Vita-Spike, 3527 Aquila, Minneapolis, Minnesota 55426.

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WEAVE RUGS — make good profits — No experience necessary. Free catalog, sample card, and low prices on carpet warp, rug filler looms, parts, inexpensive beam counter. If you have loom—advise make, weaving width please. OR Rug Company, Dept. 7916, Lima, Ohio 45802.

$500-$800 MONTHLY. Raise small laboratory-breeding stock for us. We supply equipment, breeders, and instructions. Illinois Research Farms, Dept. AAC-8, McHenry, Illinois 60050.

ARTIFICIAL FLOWER MATERIALS, Jewelry, handicrafts. Discount catalog 25¢. Flocraft, Farrell, Pa. 16121.

WE'RE THE LARGEST BUYERS of fruit jars, bottles (beams). Send $1.00 (refundable) for huge buying lists. Schroeders, Paducah, Kentucky 42001.

REFRIGERATOR, FREEZER GASKETS. All makes. Send make, cabinet model number for price quote. Modway, Box 34BT, Brookfield, Ohio 44403.

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MONEY IN DONUTS—make new greaseless donuts in kitchen. Sell stores. Free recipes. Duncan Ray, Waseca, Minnesota 56093.

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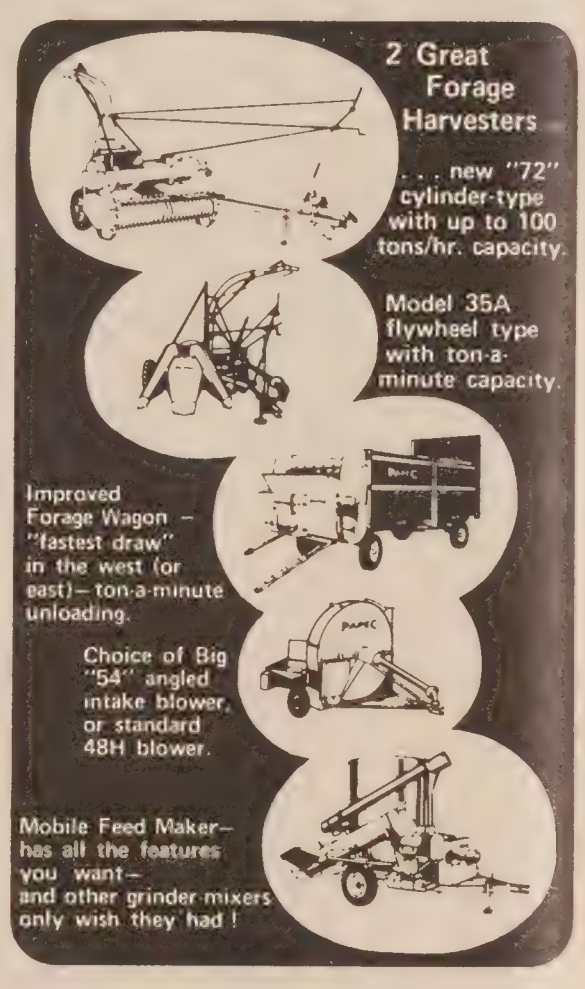

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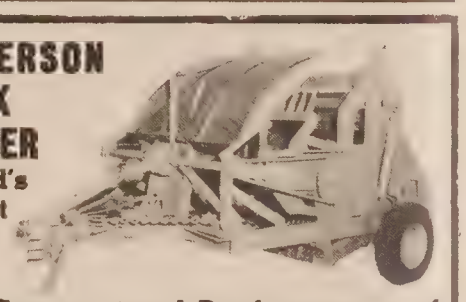

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RELIABLE TIRE DIST., 1113 Chestnut St., Camden, N. J.

Pictured is the beautiful setting at Karimor Farms, Hawthorn, Pennsylvania, to be the site for a Charolais Field Day on Saturday, August 2. The Field Day will be jointly sponsored by the Colonial Charolais Association and the Pennsylvania Charolais Association.

The program will run from 10:00 a.m. to 4:00 p.m., with a free Charolais beef barbecue at noon.

LIVESTOCK

Foal Wormer — A new drug for worming weanling foals and young horses has been introduced by Merck & Co. as part of its "Top Form" line of horse care products. The new wormer combines thiabendazole and piperazine for comprehensive protection against all major types of equine roundworms, including ascarids. In the form of palatable, oat-flavored granules, the product is simply sprinkled over the foal's food. No preliminary starving is necessary.

Charolais — The first Charolais Production Sale in the Northeast will be held at Nutmeg Farms near Bridgewater, Connecticut on September 20. Several bulls from Nutmeg Farms have been sold at private treaty recently to beef cattlemen along the eastern coast.

Belles Have Told — The New York State Cowbelles, representing the distaff side of the Cattlemen's Association, tell us they're looking to the future with appearances at Empire Farm Days in Piffard, New York in August, and the State Fair at Syracuse in late August and early September. Next January, they'll be on hand at the National Cattlemen's Association convention in Washington, D.C., where they'll host a breakfast.

Fly Control — Of interest to the horse owner is a new publication titled "Fly Control for Horses" and containing information on general sanitation, treatment of buildings and horses, and the safe use of insecticides. Authored by Extension entomologists of the New England state universities, it's available to New Hampshire residents free of charge from: University of New Hampshire Mail Service, Durham, New Hampshire 03824.

Residents of other states should write to the above address concerning availability of the publication.

Hog Tailoring — Consumers want leaner pork and U.S. farmers are making considerable progress in seeing that they get it. Recent USDA studies show that in the past 10 years, average lard yield per hog has decreased more than 25 percent, and cutout tests reveal a marked increase in lean cuts.

Hogs are not only leaner, but meatier, a change particularly noticeable in the more popular cuts . . . loin, chops, ham, bacon, and picnics. Official U.S. grade standards were revised upward last year . . . reflecting the fact that hogs on the hoof generally grade higher.

Swine Antibiotic — The Food and Drug Administration has given approval to the marketing of oleandomycin for growth promotion in swine feeds. It is the antibiotic cleared for this use in the past five years. It is being marketed as "OM-4 Antibiotic Premix," and is available in 50-pound bags. In trials recently completed, oleandomycin-fed pigs showed 5.8 percent greater growth and a 3.8 percent improved feed efficiency on a grain-concentrate feeding program.

Genes or Genius? — For the pig producer, profits may depend largely on good management rather than genetics. Litter size, for example, is only 5 to 15 percent inherited. Size of the litter is primarily affected by a healthy environment supplied by skillful management practices.

In feeder pig production, total income per sow can be increased as much as 25 percent by producing "top" grades of pigs . . . again the result of good management. The amount of feed wastage is also determined by the managerial ability of the farm operator. Ten pounds per day of feed wasted adds up to 3650 pounds a year, yet this amount of wastage . . . and more . . . is fairly common with 100 market hogs on full feed.

Safer — Biuret, a new non-protein compound that is safer, more palatable and better utilized than urea for feeding cattle and sheep has received government clearance. Unlike urea, biuret releases its ammonia slowly in the rumen, preventing excess ruminal ammonia, which can be toxic and create poor nitrogen utilization.

Developed by Dow Chemical Company under the trade name "Kedlor," the new feed additive will soon be available to ranchers for range feeding in combination with minerals and other supplements. We surmise that it won't be long before it will be available in quantity. For full information, write to: Dow Chemical Company, Agricultural Products Department, Midland Michigan 48640.

Stallion Directory — A free directory of information about stallions' standing in the Northeast is now available on request from the Litchfield County (Conn.) Hunter Breeders Society.

The directory lists purebred stallions' standing within reasonable hauling distance of Litchfield County, which is considered to be all of Connecticut plus nearby areas of adjoining states.

Breeds represented include Arabian, Quarter Horse, Welsh and Thoroughbred, as well as Appaloosa, Connemara, Morgan and P.O.A. Information includes pedigrees, physical description, location, etc. Mare owners breeding for the first time will be particularly interested in a section on stud arrangements, foaling mares, and veterinary requirements.

For your free copy of the Stallion Directory, write to the Secretary, Mrs. Louis R. Ripley, Litchfield, Conn. The supply is limited.

Protein-Free — A Shorthorn cow in the USDA herd at Beltsville, Maryland, set a record by giving birth to her third calf . . . a healthy 70½-pound heifer . . . after being on an experimental protein-free diet since weaning . . . more than 5 years. The calf's father ate the protein-free food from weaning for 3½ years.

The diet consists of sugar, starch, cellulose, minerals, vitamins and urea. Although urea has no direct food value, microbes in the rumen of cattle can convert it into protein. Nutritionist R.R. Oltjen hopes that by capitalizing on this ability of microbes, the future human diet will continue to be enriched with meat and milk. Cattle would be fed increased quantities of forage, plant wastes, and non-protein additives that stimulate protein production.

AI Beef — Beef cowherd owners can now benefit from the growth and cutability characteristics of Husker Corneller 9, a top bull calf produced at Cornell University. Frozen semen from the six-year-old Hereford, now jointly owned by Cornell and Armour and Company, is available for breeding, according to Sherrill L. Wiggs, manager of Armour's beef cattle improvement breeding research program.

In performance tests the Cornell-bred bull had a 205-day adjusted weaning weight of 672 pounds, an average daily gain of three pounds, and a 365-day weight of 1,153 pounds. In a progeny test, his offspring had an adjusted 205-day weaning weight of 407 pounds. For full information, write C. E. Hughes, Armour and Company, 401 North Wabash, Chicago, Illinois.

The Song of the Lazy Farmer

No matter how smart men may get, just figure it's a sure-fire bet that there will ne'er come a day when we improve on Nature's way. Oh, sure, we've fixed up hybrid corn, and better calves each day are born; we've tinkered with the rain a bit, though not too much has come of it; we've put more length upon our hogs, invented brand-new breeds of dogs, devised crops which can stand the test of drought and nearly ev'ry pest; and though farm folks don't think it's sound, our city friends believe they've found a way to make the summer sun last longer than God would have done.

But basically there are no flaws that you can find in Nature's laws, and it is just plain foolishness for men to think they can outguess the rules by which such things as sun and moon and rain and wind are run. For instance, when a man gets hot, his sweat-glands open up a lot; and if he slows down at that sign, then nature cools him off just fine. But s'pose he keeps up work and sweat until he's weak and soaking wet? He just gets hotter all the time and pays with sunstroke for his crime; or so my working friends tell me, I wouldn't know first-hand, by gee.

HANDY HELPS

Welding Kit — Everything needed to do a welding job is carried in this portable kit. It is especially handy when working outside the shop on large equipment. It is basically a piece of sheet metal, with rounded corners for safety and a pipe bracket for a handle. Short pieces of pipe are spot-welded in a cluster and welded to the handle posts. Rods, chipping hammer, wire brush, etc. are held in these.

Piggyback Barrel — A 55-gallon barrel of spray can be carried on the tractor for supplying the unit behind the planter. Only two bolts hold the frame . . . made of welded angle iron.

Handy Tool — One of the handiest shop tools is this large C-clamp which has a short iron rod welded to the back of it at right angles. With this stub held in a vise the clamp can be turned in any direction, which is impossible when using a bench vise. It is especially handy for working at the correct angle with plow shares.

Handy Shelf — A sawhorse with a shelf underneath is handy when working outside when the ground may be too wet or muddy to lay down tools. A strip of 1″×2″ along both edges keep tools from sliding off. The top rail is a plank instead of just a 2″×4″ and so serves as a table and work surface as well as a rest in sawing. The legs are 1-inch oak tapered to more easily rest on uneven ground.

No one ever leaves Barbados without sampling the island's specialty, delicately prepared flying fish. Shown above is the flying fish fleet at the foot of Bay Street in Bridgetown.

TRAVEL WITH US THIS FALL

Each year more and more people are waiting until the fall months to go on vacation. Then the summer tourist rush is over, the weather a bit cooler, and folks in every resort and sightseeing area seem to be more relaxed and enjoying the slowed-down pace. We have planned some wonderful fall vacations, from one to six weeks in length, and think there's something here to please everyone.

We urge you to send in your reservations soon if you are interested in going to Europe with us. There is still space available in both groups, but time is getting very short. There's no better way to see Europe than on our **Grand European Holiday** (Sept. 11-Oct. 22), especially if it's your first visit. We will cross the Atlantic on the new, luxurious Queen Elizabeth 2 and then enjoy the most exciting and famous places in England, Holland, Germany, Austria, Italy, Switzerland, Luxembourg, and Belgium.

Journey To Antiquity (Sept. 16-Oct. 7) is a most unusual vacation to places seldom included in a European holiday, the Dalmatian Coast of Yugoslavia, historic Greece, and a delightful week-long cruise of the Greek Islands and Turkey. Even if you've been to Europe one or more times, we'll bet you haven't visited these countries; here is your chance to see them in the most enjoyable way possible.

Two Fall Foliage Tours

Last year our **Fall Foliage Tours** were sold out long before departure dates, and it was necessary to disappoint some who wanted to go with us. This year's tours will be from Oct. 3-11 and 12-20. The fun starts when we board our deluxe motorcoach in Albany, New York, and head toward the Berkshire Mountains of Massachusetts.

The first highlight of our trip is Old Sturbridge Village where we explore the 36 buildings moved there from many sections of New England and enjoy lunch at Tavern-On-The-Green. The Cape Cod area and Plymouth of Pilgrim fame come next, then on to historic Boston, Lexington and Concord.

Driving north from Boston, we stop in Salem to see Hawthorne's "House of the Seven Gables" and stay overnight in Portland, Maine. The next day we find ourselves in New Hampshire's beautiful White Mountains. Mount Washington and other peaks of the Presidential Range loom above us, and everywhere we are surrounded by the brilliant autumn foliage.

Our tour ends after we drive through Vermont, stopping at the Maple Grove Museum, the capital city of Montpelier, and the world's largest marble exhibit at Proctor. Imagine nine fun-filled days, packed with thrilling sightseeing, natural beauty, wonderful food, and fine companionship for just $314!

Aloha Week in Hawaii

Last month we told you about our fall **Hawaiian Holiday** (October 11-25), planned so we can visit the four best known islands and be in Waikiki for the colorful Aloha Week celebrations. While on the popular island of **Oahu,** we will take a full day's trip around the island with stops at Sea Life Park and the Polynesian Cultural Center. Another day we'll cruise through Pearl

(Continued on page 41)

Gordon Conklin, Editor
Box 370-T
Ithaca, New York 14850

Please send me without obligation on my part, the following tour itineraries:

So. Amer. Circle Cruise____ Grand European Tour _____
Aloha Week in Hawaii ____ Fall Foliage Tours _____ Greece-Turkey Tour_____

Name _____
Address _____
_____ Zip _____
(Please print)

Harbor and see the sunken USS Utah and USS Arizona, which have been left where they sank as a permanent memorial.

On the large island of **Hawaii,** we'll see an orchid nursery, Hawaii National Park, Akaka Falls, the Parker Ranch, Kona, the City of Refuge, and many other interesting places.

On the **Valley Isle of Maui,** we'll visit Iao Valley with its volcanic freak, "The Needle," and explore Lahaina, former capital of the Islands and historic whaling center.

Sightseeing on the **Garden Isle of Kauai** will include a motor launch excursion up the Wailua River to a beautiful fern grotto and a trip to Waimea Canyon, Grand Canyon of the Pacific. Perhaps most of all, we'll enjoy our hotel being right on famous Kalapaki Beach, one of the finest in the islands.

We think you'll fall in love with this sun-drenched, beautiful land of Aloha the moment you first spot majestic Diamond Head from the plane window, and by the time you leave for home, you'll have fallen hopelessly under the magic spell of the Islands! Come with us to the Paradise of the Pacific for Aloha Week.

Vacation-of-a-Lifetime

Imagine a 47-day circle cruise from New York – through the Panama Canal and all the way around South America – aboard a luxury liner having all outside rooms, individually air conditioned and with private bathrooms! Our ship is the SS Argentina, and she has pools, lounges, a theater and gymnasium, sunny decks, and plenty of entertainment.

After a shore excursion to **Panama City,** we sail down the west coast of South America to **Callao,** Peru, and **Lima,** the capital city. Lima has been called the "fairest gem on the shores of the Pacific."

We visit many of Chile's principal cities, including **Puerto Montt,** gateway to the Chilean Lake District, an area known for its glaciers, lush virgin forests and untouched wilderness. We pass through the Strait of Magellan and call at **Punta Arenas,** southernmost city in the world.

One of the places we will enjoy at **Montevideo** is El Prado, a remarkable park boasting 850 different varieties of roses. **Buenos Aires** is the largest city in the southern hemisphere, and there are many wonderful and interesting things to see and do in this cosmopolitan city.

The busy coffee port of **Santos** and **Sao Paulo,** fastest growing city in South America, are ports of call on our way to fabulous **Rio de Janeiro,** famous for her beautiful harbor and Sugar Loaf Mountain. We'll also visit **Brasilia,** shop for some of Rio's semi-precious gems, and bask in the sun on Copacabana Beach.

The ancient city of **Bahia** will be our last port of call in South America before we cruise 2476 miles into the Caribbean to visit **Barbados** with its bewigged judges and British-uniformed policemen. **St. Thomas** in the U.S. Virgin Islands and **San Juan,** Puerto Rico, will be our final stops before returning home.

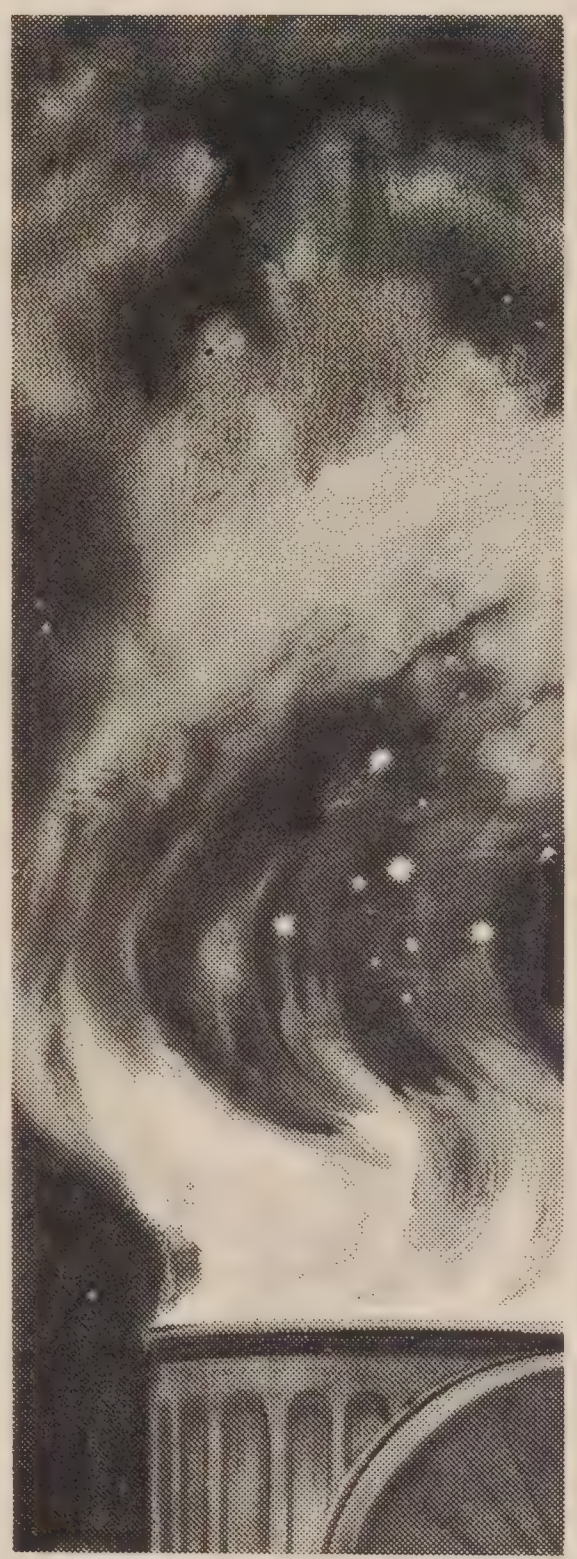
Like every American Agriculturist tour, each of these fall vacations will be an escorted, all-expense trip, with everything included in the price of your ticket – transportation, hotels, sightseeing, baggage handling, all meals, and all tips. They are arranged by the Travel Service Bureau of Needham, Mass., and this means perfection in every detail. Just mail the coupon today, asking for the itineraries which interest you. You can't go wrong whichever one you choose, and you'll have the time of your life!

RECREATION

The Moose River Recreation Area, in upper Hamilton County, is now operating with both gates open. The western entrance is Limekiln Lake, reached by a road running south from Route 28 near the village of Inlet. On the east, the Cedar River Flow is reached by taking Route 28 west from the village of Indian Lake and turning south onto Cedar River Road right to the gate.

Additional information, including a map of the area, is available in the pamphlet "Moose River Recreation Area." This free publication may be ordered from the New York State Conservation Department, Bureau of Forest Recreation, Albany, New York.

The State Conservation Department also announces the opening of the new Prospect Mountain State Parkway to the summit overlooking Lake George. About two-tenths of a mile below the actual summit itself, visitors will board a viewmobile for the rest of the trip. The charge is $1.50 per car and $3.00 per bus, with no additional cost for passengers or for the viewmobile trip. Picnic tables and fireplaces are provided.



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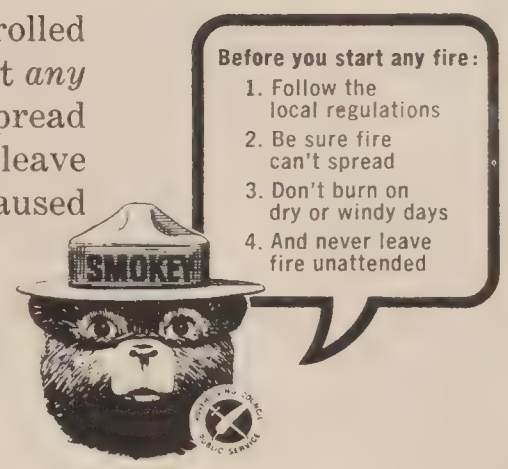

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Four fashion shows will give this year's fairgoers an opportunity to see what's new on the fall clothing scene.

With a hi ho,

COME TO THE FAIR

Gates to the 1969 New York State Fair will swing open August 26 for a seven-day run providing fairgoers an exciting look into the future, the theme of this year's exposition. There's more to see and do than ever before, and whatever your special interests, you'll find many things to enjoy in the Art and Home Center. We'll tell you about just a few of them.

The **Food Demonstration Kitchen** features a gourmet jet flight around the world as a forward glance into the age of instant travel when you can have breakfast in one country, lunch in another, and dinner in a third. We will visit Greece, Mexico, France, and the Orient, while five times each day food specialists create favorite foods of these countries.

The decor of the kitchen will be changed before each demonstration to stress the atmosphere of the country being visited. This will be done by changing panels on cabinets, refrigerators and ranges.

There will be 90 individual competitions in this year's **Creative Cooking Contest,** with judges selecting each day the best entry from all classes. At the end of the fair, the "most creative cook" will be chosen from among the daily winners. There will be cash prizes, also many special gifts and awards for the cookie, honey, vegetable and pie classes, as well as awards for the best Mexican dishes prepared.

In the **Home Arts and Crafts Department,** prize winning entries will be displayed in every imaginable category — clothing for all age groups, refinished furniture, antiques, knitting, crocheting, needlepoint, weaving, ceramics, rugs and tapestries, metal, wood and leather articles.

What will be the fashion look this fall? State Fair fashion shows will help answer this question. The "Make It Yourself With Wool" contest, 4-H Dress Revue, and presentations by McCalls and Simplicity are planned.

Women's Day at the Fair is Wednesday, August 27. The topic for the morning forum will be "Continuing Education," with panelists from various educational institutions taking part. As always, Community Service Awards will be presented during the annual luncheon.

Special attractions for children can also be found in the Art and Home Center. **Fantasy Land** will be open afternoons; this features an outdoor play area and provides art materials for children to work with in making their own creations. Also, the annual State Fair **Spelling Bee** will be held on Tuesday, August 26. For children ages 3 through 7, the Fair provides a Child Care Center with free supervision furnished while parents tour the Fair.

At the other end of the age spectrum are activities planned for Senior Citizens. Golden Age groups throughout the state will demonstrate their talents in daily performances, and on an individual basis, people will enter the Senior Citizens Arts and Crafts competition. Knitting, crocheting, quilting, woodworking and basketry are some of the classes included.

There's something at the Fair for everyone, so bring the whole family. You'll learn a lot and have the time of your life besides!

AUGUST AFTERNOON

by Mildred Goff

Watermelons cooling deep down in the well,
Brown quails calling from the stubbled wheat.
Ripe red tomatoes on a window sill.
A little breeze blowing, to break the summer heat.

New potatoes in a pot on the kitchen stove,
Crab apple jelly dripping from a ladle.
A woman putting dishes on a blue checked cloth,
Smiling at her baby sleeping in the cradle.

For the Farm & Rural Home Bookshelf

We have arranged with the publishers to supply directly to our readers, postpaid, any of the following books at the prices listed.

Books will be shipped direct from the publisher. Please allow 2 weeks for delivery.

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With Our ADVERTISERS

A new silo chute scale/meter has been developed by Van Dale, Inc. The device weighs the amount of material delivered from the silo or elevator chute and provides an intermittent flow so that both the total quantity of material and rate of flow can be measured. For full information, write to: Van Dale, Inc., Box 337, Long Lake, Minnesota 55356.

A new publication tells how potato growers can use Dacthal to get worry-free weed control three ways . . . in sprinkler-irrigated fields; with furrow irrigation; and where potatoes are grown without irrigation. The publication, titled "Dacthal: Worry Free Weed Control in Potatoes," is available by writing to: Biochemicals Division, Diamond Shamrock Chemical Company, 300 Union Commerce Building, Cleveland, Ohio 44115.

"Gain S.V.P." is the name of a new cleaner for exterior surfaces of milking equipment . . . developed especially to remove water and milk stone, grease, dried milk, iron stains, and water spots. It does the job in one wash, rather than the two usually required.

For more information, write FRM-CHEM, Inc., Box 9903, St. Louis, Mo. 63122.

International Harvester claims its 56 Blower can blow more silage with up to 20 percent less horsepower because of the exclusive 45-degree feeding system that augers crop in a uniform, near straight-line flow to a 56-inch diameter rotor.

A new method of delivering silage for bunk feeding is now being marketed by Chore-Boy Division, Golay & Co., Inc., Cambridge City, Indiana. Known as the Fork-A-Veyor system, it handles silage, haylage or greenchop with ladderlike steel track structure and steel paddles, each of which has five teeth.

It is supended by chains and moves back and forth. As the track moves forward, the paddles drop by gravity to bite into the silage and roll it forward. On the backswing, the paddles flip upward and ride over the feed. The track is motivated by a gear reduction power unit and makes a 30-inch swing 30 times a minute.

Uniroyal, Inc. has developed a miticide called Omite, which effectively kills most harmful species of orchard mites. Extensive field tests in 25 states showed no harm to beneficial insects, such as bees, and the new miticide also allowed good survival of insect predators.

A new three bottom semi-mounted plow with a bottom add-on unit is now part of the Allis-Chalmers 2000 Series Monoframe plow line.

The new plow is available with three beam choices offered for all Monoframe units . . . hydraulic reset, with a self-contained hydraulic system for rocky soils; spring trip beam for use where soil conditions are moderately rocky; and shear bolt beams for soils without rocks or stumps.

Have A BARBECUE Buffet

by Alberta Shackelton

Buffet meals with a choice of foods to please everyone are always a popular way to entertain indoors or outdoors. So why not plan a Backyard Barbecue Buffet to entertain summer guests or to bring together a friendly gathering of neighbors? For the latter, it might be a cooperative affair with each neighbor bringing a "specialty of the house," and with someone bringing along an extra portable grill to take care of overflow orders of meat and vegetables cooked over the coals.

The following suggestions will help you get started in planning your own Barbecue Buffet for August's warm days.

MEAT FROM THE GRILL

Barbecued Ham Slices: Arrange boneless **fully cooked** or canned ham slices about ½ inch thick on grills or grids, 4 to 5 inches from glowing coals; brown and turn. After turning slices, brush with your own favorite barbecue sauce or use recipe below.

Wiener Wheels: Make crosswise slashes ½ inch apart and not quite through the length of the wieners. Hold ends together with short metal skewer or toothpick. Place on grill to heat; turn and brush with barbecue sauce.

Steaks and Burgers: Prepare a tangy butter mixture of ½ cup butter, 1 teaspoon garlic salt (or your favorite herb or combination), 1 teaspoon paprika, and 2 teaspoons lemon juice. Place steaks or burgers 3 to 4 inches above low-glowing coals. Spread with one half butter mixture. Brown; turn and spread with additional butter mixture. Cook to desired degree of doneness.

Brown and Serve Smoked Sausage Links: Baste with sauce as sausages are grilled, until heated through and browned.

SWEET-SOUR BARBECUE SAUCE

1 cup catsup
1 cup water
⅓ cup vinegar
⅓ cup brown sugar
½ cup finely chopped onion
2 tablespoons prepared mustard
1 teaspoon celery seed

Combine ingredients; simmer 15 to 20 minutes to blend flavors. Makes 2 cups.

GLORIFIED HAMBURGERS

1 pound ground beef chuck or round
1 cup dry bread crumbs
¼ cup milk
1 egg
1 tablespoon each finely minced parsley, pimiento and onion
½ to 1 teaspoon salt
⅛ teaspoon pepper
4 to 5 strips uncooked bacon

Soften bread crumbs in milk and add to meat. Mix in egg and rest of ingredients, tossing lightly with a fork. Form the mixture lightly into 4 or 5 balls about 1½ inches thick. Wrap a slice of bacon around each meat ball and fasten with a toothpick. Broil over low-glowing coals about 6 minutes each side, or until center is done and bacon crisp; baste each side with barbecue sauce if desired.

MOLDED POTATO SALAD

2½ to 3 quarts cooked potatoes, cut in cubes
½ to ⅔ cup clear French dressing
4 hard cooked eggs, chopped
2 cups chopped celery
1 cup chopped green pepper
½ cup chopped pimiento
½ cup mayonnaise or salad dressing
½ cup thick sour cream
4 green pepper rings, ⅛ inch thick

While still warm, put cubed potatoes in large bowl and pour French dressing over them; toss until dressing is absorbed. Add chopped eggs, celery, green pepper and pimiento. Combine may-

(Continued on next page)

Photo: American Meat Institute

Something for everyone makes a barbecue a success. A grill loaded with barbecued wieners, smokies, steaks or hamburgers, and ham slices is a sure-fire winner with all ages.

BARBECUE BUFFET

Meat Choice from Grill
Barbecue-Sauced

(Strip Steaks or Plain or Glorified Hamburgers, Ham Slices, Wiener Wheels, Brown and Serve Smoked Sausage Links)

Hamburger and Wiener Rolls and/or Herbed Italian or French Bread

Molded Potato Salad Roasted Corn Mixed Cabbage Slaw

Relishes

(Tomato wedges, cucumber fingers, celery and carrot sticks, pickles, olives, and deviled eggs)

Sherbet-topped Fruit Melange Chewy Pecan Squares

Coffee Iced Tea Punch

onnaise or salad dressing with sour cream (thin with a couple tablespoons milk if necessary) and using a fork, toss lightly with potato mixture until well blended but not "runny." If mixture is not moist enough, more sour cream may be used.

Spoon into a 10-inch angel food pan which has been generously spread with mayonnaise and press down lightly to make top even. Chill several hours to set and allow flavors to blend.

Just before serving time, loosen salad around outer edge and tube of pan with a thin knife and invert pan over a large crispy greens-covered salad plate, letting salad mold drop on plate. Arrange around edge of mold a ring of half tomato slices placed close together with cut sides down. Garnish top with green pepper slices. Serves 10 to 12.

GREEN AND RED CABBAGE SLAW (with Boiled Dressing)

2 cups shredded green cabbage
2 cups shredded red cabbage
2 cups shredded Savoy or Chinese cabbage
2 tablespoons flour
2 tablespoons sugar
1 teaspoon dry mustard
½ teaspoon salt
¼ teaspoon paprika
½ cup milk
3 egg yolks
¼ cup vinegar
1½ tablespoons butter
¼ cup light cream or rich milk

Combine shredded cabbages in bowl; cover and refrigerate for 1 hour to crisp. Combine flour, sugar, mustard, salt, paprika, cold milk, egg yolks and vinegar. Stir over low heat until smooth and thickened. Add butter and cream or milk. Chill.

Thin to heavy cream consistency with a little light cream or milk if necessary before tossing with cabbage. Serves about 8.

Note: You may substitute a cooked-type commercial salad dressing for the above "made-from-scratch" one if desired.

HERBED HOT BREAD

Cut a long loaf of French or Italian Bread diagonally into thick slices, almost through to bottom crust. Spread herbed butter between slices. Wrap loaf tightly in foil and place on grill over hot coals. Turn frequently and heat for about 20 minutes.

For **Herbed Butter,** combine ½ cup soft butter, dash salt, pepper, paprika, and about ½ teaspoon of your favorite dried herb mixture. Or use 3 tablespoons chopped onions or chives in place of herbs. Garlic salt and a little chopped parsley may be added if desired.

SHERBET-TOPPED FRUIT MELANGE

Sliced peaches, fresh or thawed frozen ones
Frozen raspberries, thawed
Seedless green grapes
Black pitted cherries, canned or thawed frozen ones
Melon balls
Ginger ale

Combine your chosen combination of fruits in glass bowl and chill. At serving time, cover fruit with ginger ale; place bowl of fruit and another bowl containing scoops of lemon, lime or orange sherbet in convenient place with dessert dishes. Invite guests to serve themselves to a delicious sherbet-topped fruit mélange and Pecan Squares.

Note: If sliced fresh peaches are used, combine with an ascorbic acid mixture as used for freezing, to prevent darkening.

CHEWY PECAN SQUARES

4 medium sized eggs
2 cups brown sugar, firmly packed
1 tablespoon salad oil
1½ teaspoons vanilla
1½ cups all-purpose flour
1½ teaspoons baking powder
1½ cups coarsely cut pecans

Beat eggs with a rotary or electric beater until blended. Stir in brown sugar, oil and vanilla; continue beating until light and fluffy and sugar is completely dissolved. Sift together and add all at once the flour and baking powder. Stir until well blended and then add pecans.

Place in a well greased and lightly floured pan about 13 ×9 inches, smoothing over top. Bake in moderate oven (350°) 25 to 30 minutes, or until center springs back when touched lightly with fingertip. Cool on wire rack 15 to 20 minutes and then cut into 24 squares or 27 to 30 bars. If desired, sprinkle while warm with confectioners' sugar.

For a crisp square or bar, store loosely covered in layers separated by film or foil; store in a tightly covered container for a softer, chewier cookie.

Note: For a tasty dessert, cut slightly larger squares, top them with ice cream and pass butterscotch, caramel or chocolate sauce.

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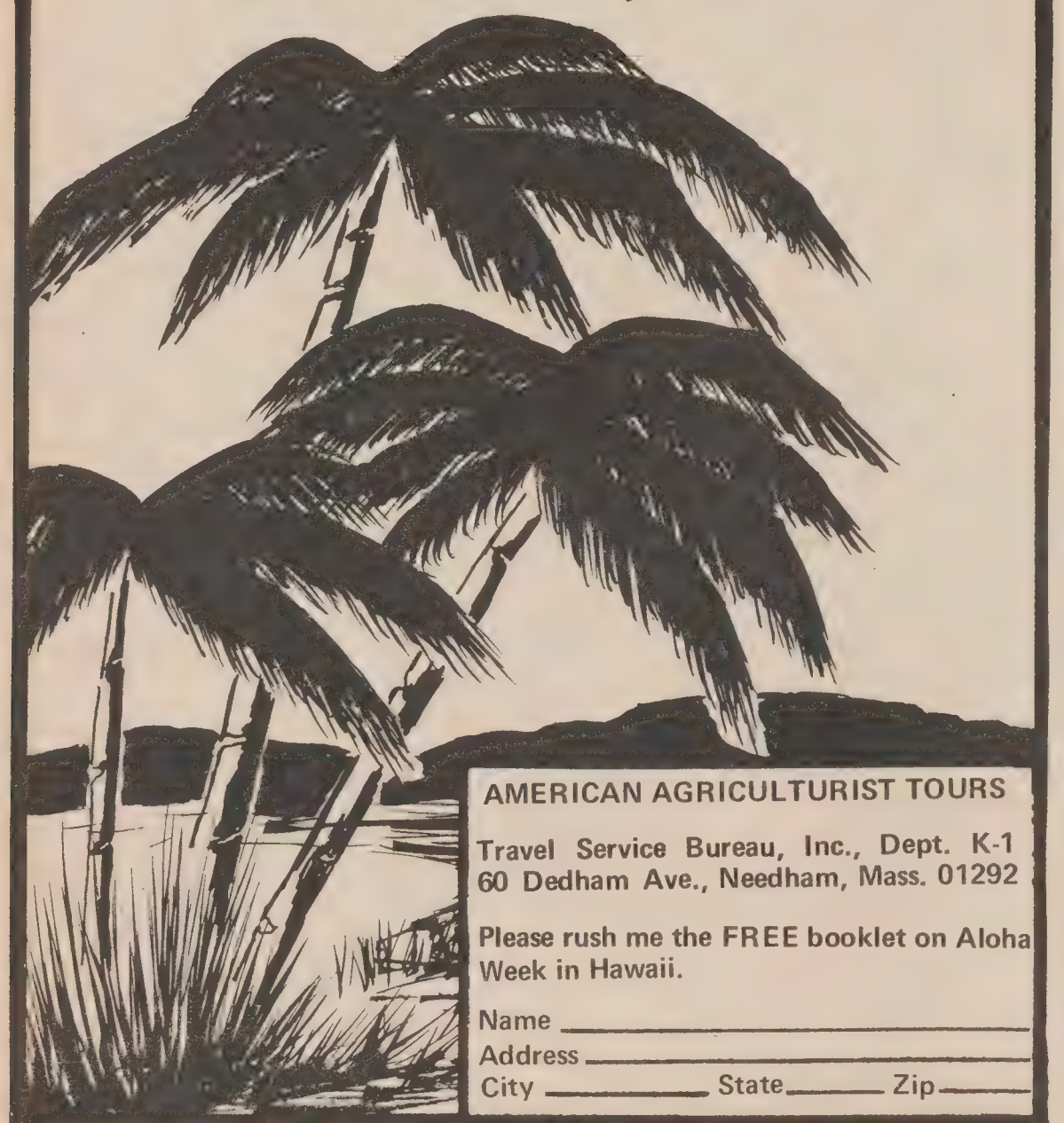
JOURNEY TO DAY BEFORE YESTERDAY

by E. R. EASTMAN

Almost everyone likes to remember the experiences and fun that they had when life was "young and gay." And young people enjoy reading about the adventures . . . and misadventures . . . of Grandpa and Grandma in the Horse and Buggy Days, so well described in "Journey to Day Before Yesterday."

A copy of this well-bound book, illustrated with many old-time pictures, can be had by sending check or money order for $7.30 (New York State tax included) to American Agriculturist, Book Department, Box 370, Ithaca, New York 14850.

Hawaii Aloha Week



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Remember, October 11-25 is Aloha Week, when Hawaiians go all out to show you the 50th state! This tour features: Hula Dancers, Big Game Fishing, Orchid Gardens, Basking on Tropic Beaches, Pearl Harbor Memorial, Giant Craters, Polynesian Villages, Sea Life Park, Active Volcanoes, Parker 300,000 Acre Ranch, National Cemetery of the Pacific, and much, much, more!

Plant Care BEFORE Vacation

by Nenetzin R. White

Since August is our traditional vacation month here in the Northeast, let's make sure our plants don't suffer while we're away. It would indeed be sad to return and find our prized specimens weedy, wilted or dead.

Lack of water can cause irreparable damage or the death of plants, while over watering (if you have someone come over to water) can cause excessive weed growth. This cuts down the air circulation and encourages fungus, black spot, molds, and other such diseases.

The real answer, I feel, is to apply a good mulch. Mulches conserve moisture, discourage weeds and grass (or make them very easy to remove, roots and all), and temper the heat from the summer sun. Mulches can also be quite ornamental and enhance your plantings' appearance as well.

What To Use?

What will you use for a mulch? Please remember that these are my ideas; and while in general I agree with Experiment Stations and what is normally used, there will be a few exceptions. My experience covers some 35 years in this business, on an acre and a half of our own grounds.

The least inexpensive mulches are dry leaves, grass clippings, or any other chopped organic material. These must have a little ammonium nitrate or another fertilizer high in nitrogen mixed with them. If not, as they decompose, they will rob nitrogen from the soil and make the plants yellow.

The disadvantage of these mulches is they tend to blow away. It is quite permissible and a good practice to mix a little soil with them to hold them in place. These mulches are not particularly attractive or long lasting, but they are inexpensive or "for free" from your own place.

Old hay, straw, or sawdust should also be treated with nitrogen, and again they blow about. Pine needles are good for acid-loving plants, such as dogwoods, rhododendrons, azaleas and evergreens.

Peat moss was long considered the best mulch going; it's long lasting and has good color, but it too will blow away. Also, because it is very fine, it sometimes forms a crust which air and water can hardly penetrate.

I believe peat moss is one of our most excellent **soil conditioners** (it is not my favorite mulch), and I always use it in the planting pockets of all plants. Be sure you add all the water it will absorb, or it will rob moisture from soil and plant roots. As a mulch, it tends to make plant roots come up near the surface, which in most instances should be avoided. On even a mild slope, it will also tend to wash and erode.

To my way of thinking, and fast becoming a favorite with teachers, Experiment Stations and users, shredded hardwood bark is the best all-round mulch available today. It doesn't blow (it's shredded, but in sections somewhat like excelsior used to be), has a nice deep brown color, allows air and water through, and lasts for several years.

Professor Charles Wolf, research forester at the Northeastern Forest Experiment Station at Princeton, West Virginia, says that extensive tests proved hardwood bark to be an outstanding all-round mulch. In addition to conserving water and suppressing weeds, it gave excellent protection against wind and water erosion and effectively insulated plant roots from extreme temperatures.

Bark bits or nuggets (fairly new) also seem to be doing an excellent job. With attractive color, they allow water and air through and last for many years.

Many people like mulching paper or plastic sheets. We started experimenting with first the paper mulches prior to World War II and then with the plastics, even before they were generally on the market. I do not like them, for I do not think plants make as much growth or look as well as they do with cultivation. The soil under these covers is rather dank and slippery and to me, looks generally unhealthy. Besides the paper and plastic look out of place and unnatural among flowers.

All mulches should be laid down to a depth of at least 3 inches, and I like a little more with such as the shredded hardwood bark. Leave this in place the year round, moving it only to fertilize.

I think you will find that if you put a good mulch on before vacation you will return to find your plants in a good, healthy condition and with very few weeds. I hope you **and** your plants have a very happy vacation!

DO YOU HAVE . . .

An old "Rebeccas" cookbook? **Mrs. Vernon C. Thompson, Route 1, Anson, Maine 04911,** would like one.

A 1967 Simplicity Jiffy Coat Pattern No. 6311, size 14 or 14½, either used or new? If so, please contact **Mrs. G. M. Allen, Worcester, N. Y. 12197.**

A recipe for an old fashioned molasses sponge cake? If so, will you share it with **Mrs. William Schreiber, Sr., R. D. 1, Elmer, N. J. 08318.**

Dates to Remember

Aug. 1-3 - Annual Reunion Pioneer Gas Engine Association, Fairville, N.Y. (just north of Newark, in Wayne County).

Aug. 2 - Charolais Field Day, Karimor Farms, Hawthorn, Pa.

Aug. 3-6 - American Society of Animal Science Annual Meeting, Purdue University, Lafayette, Ind.

Aug. 3-6 - American Institute of Cooperation 41st Annual Session, University of Illinois, Urbana, Ill.

Aug. 5-7 - Empire Farm Days, near Greigsville, N.Y.

Aug. 8-9 - Vermont Maplerama, Windsor and Orange Counties.

Aug. 9 - New York Junior Angus Association Field Day, Maple Avenue Farm, Earlville, N.Y.

Aug. 10-13 - 24th Annual Meeting Soil Conservation Society of America, Colorado State University, Fort Collins, Colo.

Aug. 13-16 - 15th Annual Meeting Eastern Apicultural Society of North America, Cornell University, Ithaca, N.Y.

Aug. 13 - Annual Holstein Connecticut Black and White Show, Tolland County Agricultural Center, Rockville, Conn.

Aug. 13 - 57th Annual Open House of Connecticut Agricultural Experiment Station, Lockwood Farm, Hamden, Conn.

Aug. 14 - Massachusetts Black and White Show, Mallary Arena and Cow Palace, West Springfield, Mass.

Aug. 14-17 - New York Steam Engine Association Pageant of Steam, Roseland Park, Canandaigua, N.Y.

Aug. 16 - Annual Flower Field Day, Joseph Harris Company, Moreton Farm, Rochester, N.Y.

Aug. 16 - New York Shorthorn Association Field Day, Sangamon Farm, Dewittville, N.Y.

Aug. 16-17 - Lumberman's Roundup, Middlebury, Vt.

Aug. 17-20 - 22nd Annual Convention National Association of Animal Breeders, Park Motor Inn, Madison, Wisc.

Aug. 19-21 - Birch Symposium, University of New Hampshire, Durham, N.H.

Aug. 21-22 - New England Grain and Feed Council Summer Seminar, University of New Hampshire, Durham, N.H.

Aug. 24-26 - Massachusetts 4-H Dairy Show, Mallary Arena and Cow Palace, West Springfield, Mass.

Aug. 26-28 - Agricultural Progress Days, Fox Chase Farms, Towanda Airport, Towanda, Pa.

Aug. 26-Sept. 1 - New York State Fair, Syracuse, N.Y.

Sept. 4-5 - 20th Annual New York Meat Animal Show and Sale, Empire Stockyards, Caledonia, N.Y.

Sept. 5-7 - 46th Annual Yorktown Grange Fair, Yorktown Heights, N.Y.

Sept. 6 - Maine Farm Day, Harland Bragg Dairy Farm, Sidney, Maine (rain date Sept. 7).

Sept. 9 - Vegetable Crops Field Day, Pennsylvania State University Research Farm, U.S. Rt. 45, 5 miles west of Pine Grove Mills.

Sept. 12-21 - Eastern States Exposition, West Springfield, Mass.

Sept. 21-25 - Annual Meeting National Association County Agricultural Agents, Chalfont-Haddon Hall Hotel, Atlantic City, N.J.

Sept. 25-27 - National Poultry and Egg Marketing Conference, Hotel Ambassador, Chicago, Ill.

Sept. 27 - Open House (9:30-11:30 a.m.) new Animal Industries Building, Pennsylvania State University, University Park, Pa.

Sept. 29-30 - Third National Poultry Litter and Waste Management Seminar, Salisbury, Md.

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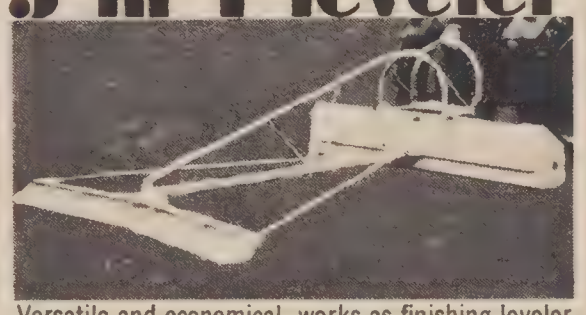

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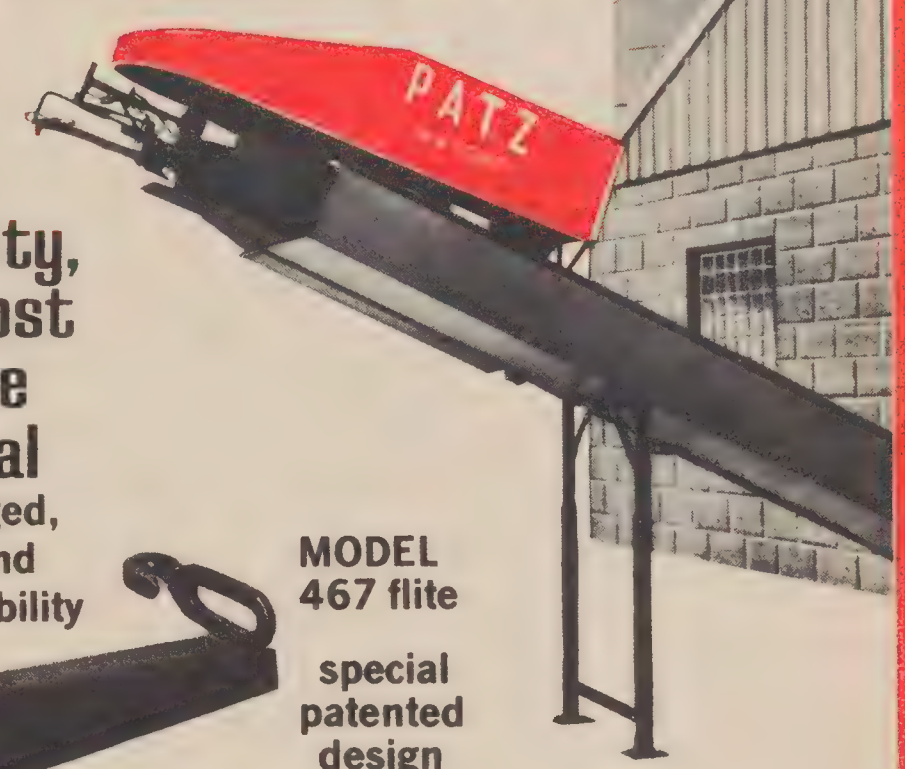

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Ed Eastman's Page

IMPORTANT DECISION

Ever since the Pilgrim fathers landed on Plymouth Rock, it has been the keen desire of most American parents to give their children a better education than they themselves had. While this is a praiseworthy ideal, it is not always practical at least so far as it means giving every boy and girl an arts and science college education. There are some young people who never ought to go to college and the attempt to send them there is one of the reasons why we have so much trouble on the American college campuses today.

There are many young minds . . . strong, healthy and intelligent . . . who cannot get interested in the regular college courses of arts and sciences. And the attempt to send them there is a waste of time and money. Such students who cannot get interested in the regular college work, and being young and full of youthful energy and spirits, are easily led into wrong activities.

But this does not mean that a boy or girl's education should end with high school. In New York and in most other states, there are vocational-technical schools and junior colleges where a young man or woman can find training in schools that suit his talents and interest. There are also many evening schools and short courses. There are one or more possibilities near you. Pick the course that fits you.

KING CORN

It's a pleasant August noon memory on the home farm when Albert and Fay, my brothers, and I used to race to see how many ears of sweet corn we could eat and stack the recording piles of cobs by our plates. Fay was soon left behind in the race but Albert usually won, after considerable argument about the size of the ears. I have forgotten what the record number of cobs was, but it was astonishing, especially when I consider how few ears of corn I can eat now!

Corn is the number one crop in America and always has been since the Indians showed the Pilgrims how to grow it.

The next time you look at your growing corn crop or eat some by-product of corn, give credit to what it has done for American farmers and consumers.

Believe it or not, corn either wholly or in part, appears in six hundred and fifty different items of food or other by-products. You are most apt to think of it as sweet corn on the cob, corn flakes, corn bread or johnny cake. But those foods are only a small beginning. Corn is found in candy, mixed with fruits, ice cream, soups, many kinds of salad dressings, relishes, jams, sausage, starch, corn syrup, syrup mixed with dextrose, catsup and many, many other food combinations.

Every farmer knows how important corn is in many kinds of grain mixtures, and corn for silage is a great industry all by itself.

To one who loves the country and farming, there is no more beautiful sight than a great cornfield with the matured ripened ears hanging down and the long majestic side of a cornfield contrasting with the beautiful green meadow by its side. Of all the crops of the world and especially of America, corn is indeed king.

DEDICATED SERVICE

The other day the office staff of American Agriculturist gave a luncheon to honor Mrs. Isa Liddell for thirty-five years of service to American Agriculturist and to its readers, as secretary to the editor and recently as assistant to the editor. Twenty-three years of that time Isa served as my secretary and I never knew a better one.

What a splendid term of service on one job! She held that exacting position under three editors, H. L. Cosline, Gordon Conklin and myself and is still working part time for the organization.

It is altogether fitting and right that a person who has done such long and dedicated work should be recognized while she is still here to know how highly her associates respect and like her. "You can't read your tombstone when you are dead."

I join with the staff to wish for Isa many more happy years of close association with American Agriculturist on a part-time basis, with time for her and her husband, John, to do some of the things that they have always wanted to do, but for which they never had time.

VACATION TIME

Just about everybody takes a vacation except dairymen. Most of them think that there is no escape from the milking chore that comes twice every day in the year, including Sundays and holidays.

But some dairymen take a vacation every year, proving that it can be done. A family picnic between chores several times during the summer can be easily arranged and makes a good rallying time for the whole family. For a longer vacation maybe two neighbors can change works to get the cows milked while one of the two can take a few days off.

If you are a dairyman or a dairyman's wife, write me a short letter telling me how you managed to spend a happy vacation.

HISTORY REPEATS

It is surely interesting how history tends to repeat itself, even in small matters . . . maybe not to the last detail but certainly in a general way.

In great-grandpa's time, almost all the work on the farm was done by hand, and to get it done required a long day with a hoe, a scythe, a cradle, the hand rake, and the axe. That meant getting into the field in the summertime by seven o'clock, and working at least a ten-hour day, with an hour out for nooning.

What a welcome sight it was, therefore, to see great-grandma or the girls coming to the field with a mid-morning snack. Almost always this would include milk or homemade buttermilk or switchel. There might also be a big hunk of johnny cake with plenty of homemade butter, or homemade bread, fresh out of the oven, fried cakes or some other cake, or even pie. Today, several generations later, we have the same morning snack in the cities, and sometimes even on the farms. Only today we call it a "coffee break."

Incidentally, there seems to be a continuing interest in the old-fashioned summer drink called switchel. There are a number of recipes, but Marjorie Burkart of Mumford, New York, says that her husband, son, and herself made a very satisfactory drink from the following recipe:

1 gallon cold water; 1 cup good vinegar; 2 cups sugar; 2 tablespoons ginger. Shake and chill.

Try it!

HAPPY EXPERIENCES

For years I have been in the habit of asking my friends if they would like to live their lives over if they had the opportunity. The answer to this is generally "no" or a qualified answer saying, "Yes, if I could change certain things."

Memory has a nice habit of helping us to forget or gloss over the unhappy things of our past, leaving only the good things to remember.

Judging by the many letters I receive, there is one way you can realize many of the things of the past and that is by reading and rereading my book, "Journey to Day Before Yesterday."

To get a book, write American Agriculturist, Department Book, Savings Bank Building, Ithaca, New York 14850. The price is $7.30 including tax.

EASTMAN'S CHESTNUT

Mr. Clinton Wilber thinks this would make a good Chestnut. I do too, so here it is:

One of these young "modernist" preachers accepted a call to a little country church in Alabama. After a few Sundays he announced that henceforth the members would refrain from such out-moded behavior as saying "Amen!" and "hallelujah!" during the sermon.

The very next Sunday a little old lady got carried away and loudly exclaimed "Amen! Praise the Lord!"

Two ushers hastened down the aisle, lifted her gently but firmly out of her seat and half carried her down the center aisle.

She waved her handkerchief the entire route, crying: "Jesus rode one into Jerusalem and it takes two to carry me out!"

SERVICE For The Northeast Farmer BUREAU

by M. A. Parsons

BEWARE!

A reader from Corning, N. Y. recently sent us a clipping from a local newspaper, concerning an elderly Hammondsport woman who was fleeced out of almost $900.

Two men had come to her home, asking if she needed any home repair work done. The men supposedly agreed to paint two chimneys, repair, clean and paint eaves, repair a garage roof and paint it along with two other small roofs, for a price of $100.

Three hours later, they said the work was finished and that she owed them $900. She paid them in cash and they gave her back $10 as a "cash discount." We understand the work they did was worth no more than $50!

As of this writing, two men have been arrested as the result of a tip to the State Police.

A subscriber from Shokan, N. Y. tells us that two men with a pickup truck with Arkansas plates stopped at his place and wanted to spray his front porch. The porch is about 22 ft. by 7 ft., and the roof at one end is in bad condition, needing new sheeting boards, and has some large holes.

However, the men said they would spray the roof and make it waterproof for $3.00. Our reader refused to let them do it and he probably saved himself an enormous bill for a useless job.

WORDS AND MUSIC

Within a week, we received the following two letters:

"My 15-year-old boy wrote a song and sent it in to a company that wanted $25 to put it to music. They wanted him to sign a contract, which I didn't let him do. Then, they wrote him that he could send in monthly payments to a total of $29.

"He sent $10 and got his receipt. He wants to send the balance now, but I would like to know if the company is O.K. before he sends any more money. Please let me know as soon as you can. They tell him his song will go a long way and, if it will, I don't want to stand in his way."

"I have written a lyric to be set to music and I answered an ad in the paper. Now the man who wrote the music wants 50-50 from what we sell, besides what I have already paid him. Is this a good company? I hate to pay money out and not get anything out of it. I am an elderly lady and haven't a lot of money to throw away."

We have never recommended any firms which offer to set poems to music if they charge a fee for handling the song. We have been told by reliable sources that no successful song has ever come through such a firm. They say that legitimate publishers invest their own money in songs they think will succeed, and the writer of the song gets paid outright or on a royalty basis.

If it is a matter of wanting words set to music, a person would have to decide if it is worth the cost. It is doubtful that one could expect any financial returns. Printing is not publishing; having a song printed does not mean that it will be accepted by the music industry.

According to the contract used by the first company mentioned above nothing in the contract is to be construed as any promise or prediction of financial gain to the author through service performed by the company. The company simply composes music to the lyrics, rearranges the lyrics when necessary, and furnishes demonstration records and lead sheets. They are not publishers and do not promote the songs.

ADDRESSES WANTED

Daniel Henry Henries, born in Penn Yan, N.Y. in 1909. Worked as a laborer. Last heard from in Rochester in 1937. His son is anxious to get in touch with him.

* * *

Descendants of Dozer family, any branch. Also spelled Toser, Dosher, etc. Henry and Mary Dozer born approximately 1783 in Virginia, moved to Ohio in 1805.

* * *

Charles H. Wickstrom whose last address was Maynard, Mass.

* * *

Mrs. Rose Stone last known to be living at R.F.D., Cambridge Springs, Pa. Daughters Lena and Helen may be living in Cambridge Springs, or Erie, Pa.

* * *

George and Mary Politas or Feongus, brother and sister of Forest and Gwendolyn Leland of Harrison, Maine.

* * *

Last name and address wanted of our Bloomsburg Fair "buddies," Tony and Wanda. The Hunsingers, R. 2, Athens, Pa.

* * *

Descendants of Meredith family living in 1860's in Jefferson or St. Lawrence Counties, N.Y. Mrs. Meredith was a Wood from Champion, N.Y. (Jefferson Co.).

* * *

Florence Sabo, whose last known address was Williamsburg, Mass.

* * *

Descendants of Oliver Alger of Nelson, N.Y.

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BENEFITS RECENTLY PAID

A friend's name may be in this list

Charles L. Gottlieb, Belmont, N.Y. ..... $ 692.50
Kicked by cow—internal injuries
William David Furnise, Houghton, N.Y. .. 403.28
Hit by tree—head injury
Mildred Bailey, Castle Creek, N.Y. 200.00
Slipped and fell—broke ankle
Helen J. Waite, Randolph, N.Y. 1461.63
Auto accident—broke ankle
Neal P. Green, Jr., Delevan, N.Y. 294.14
Caught in chain—injured hand
Paul Tallman, Moravia, N.Y. 294.25
Truck accident—inj. head, chest
Lois Teachout, Sterling, N.Y. 222.86
Burned on stove—inj. legs
Clarence Luce, Cassadaga, N.Y. 2240.00
Pedestrian acc.—mult. injuries
Albert Echman, Jr., Frewsburg, N.Y. 984.67
Kicked by horse—head injuries
Elsa Pesu, VanEtten, N.Y. 635.90
Slipped and fell—broke arm
Herman F. Sullivan, Plymouth, N.Y. 824.95
Kicked by cow—inj. knee
Bert Trombley, Ellenburg Center, N.Y. .. 844.87
Fell off steps—inj. back
Wayne Elwood, Cincinnatus, N.Y. 950.00
Caught on self-unloading wagon—loss of arm
David Murdoch, Cortland, N.Y. 1084.04
Overturned trailer—broke jaw
Burnett Burnside, Bloomville, N.Y. 203.58
Arm caught in hay baler—inj. hand
Peter Svegl, Bloomville, N.Y. 102.84
Crushed by cow—broke rib

Frances M. Crandall, Medina, N.Y. ..... $ 385.00
Cart tipped over—broke hip
Floyd R. Caster, Sandy Creek, N.Y. 176.89
Tractor acc.—injured knee
Hattie Collins, Richfield Springs, N.Y. .. 1330.00
Fell—broke hip
Clifford F. Lewis, Valley Falls, N.Y. 894.38
Fell on hay bales—inj. knee
Andrew M. Brown, Dec'd DeKalb Junction, N.Y. 1900.00
Pedestrian acc.—loss of life
Dale Wright, Ogdensburg, N.Y. 100.00
Fell from ladder—broke arm
Virginia Schoeffler, Cobleskill, N.Y. 1680.00
Fell on concrete—broke leg
Douglas W. Teed, Watkins Glen, N.Y. 755.40
Slipped fell—broke elbow
Albert C. Robbins, Bath, N.Y. 141.42
Gored by bull—cut hand
Joseph D. Bouton, Addison, N.Y. 1100.15
Kicked by cow—broke leg
Delores Billings, Prattsburg, N.Y. 523.99
Auto acc.—whiplash injury
Charles C. Gorr, Dec'd, Livingston Manor, N.Y. 1300.00
Overturned canoe—drowned
Ralph L. Hollenbeck, Spencer, N.Y. 457.35
Car-truck acc.—head injury
Dewitt G. Stevens, Dec'd, Spencer, N.Y. 2250.00
Caught in corn picker—loss of life
Gerald Goodale, Groton, N.Y. 448.04
Farm truck acc.—inj. eye, knee

Recent deaths and retirement of long time fieldmen have caused openings in certain areas of New York State and New England.

We are now looking for several career minded young men who wish to become local agents.

To learn of the opportunities available write to P. O. Box 100, Ithaca, N. Y.

Merritt Eddy, South Wales, N.Y. ..... $ 280.00
Hit by baseball—broke jaw
Malcolm P. Wyman, Williamsville, N.Y. .. 806.66
Fell off ladder—broke pelvis
Mert Clark Mitchell, Burke, N.Y. 766.74
Playing ball—broke rib
William Makarowski, Johnstown, N.Y. 961.76
Slipped off tractor—inj. knee
Jennie Piechocki, Alexander, N.Y. 1140.00
Fell on escalator—broke leg
George H. Garrow, W. Winfield, N.Y. 500.00
Fell from hay elevator—loss of leg
Ruth Eggleston, Theresa, N.Y. 195.93
Fell downstairs—inj. shoulder
Pearl Lamb, Lowville, N.Y. 893.11
Train hit car—inj. shoulder, chest, hip
Robert Peterson, Lowville, N.Y. 124.42
Caught in chopper—inj. fingers
Roscoe Fanning, Copenhagen, N.Y. 318.56
Fell from hay wagon—broke heel
Bertha Yancey, Lowville, N.Y. 468.54
Glass insulator broke—cut thumb
Patrick R. Holl, DeRuyter, N.Y. 240.00
Kicked by cow—inj. toe
Luther W. Jennejahn, Hilton, N.Y. 1796.76
Auto acc.—multi. injuries
William Staley, Jr., Amsterdam, N.Y. 540.92
Hit by bull—inj. elbow
Maurice Loomis, Cassville, N.Y. 1450.00
Struck by tree limb—head inj.
William H. Benedict, Stanley, N.Y. 509.28
Caught in pulley—inj. hand

Charles H. Hall, Hartford, N.Y. ..... $ 325.00
Knocked down by door—broke hip
Rene L. Gobeyn, Marion, N.Y. 120.00
Fell from hay wagon—broke hand
Hartson Bell, Walworth, N.Y. 173.57
Fell into fan—broke fingers
John A. Cox, Wolcott, N.Y. 113.00
Lawn mower acc.—broke finger
Clifford Huntley, Walworth, N.Y. 346.56
Caught on clothes line—broke knee
Donald C. Clark, Jr., Dec'd, Perry, N.Y. .. 1050.00
Drowned while swimming
Leslie Chamberlain, Mainsburg, Pa. 275.00
Auto acc.—frac. ribs, cuts & bruises
Kenneth Loomis, Sugar Grove, Pa. 227.78
Cow pushed into partition—broke finger
David Newman, Little Meadows, Pa. 1450.00
Auto acc.—broke leg, cuts
Ralph Savitz, Lake Ariel, Pa. 132.14
Fell off load of hay—inj. back
Catherine Dame, Newark, N.J. 117.14
Pedestrian acc.—injured knee
Maurice Rosenthol, Pennington, N.J. 1771.45
Caught in PTO—broke collarbone
Herman E. Thayer, Dec'd, Amherst, Mass. 1900.00
Truck acc.—loss of life
Myrtle S. Nickless, Freedom, Maine 340.00
Auto accident—mult. injuries
Lillian T. Townsend, South Woodstock, Vt. 1340.00
Hit by jeep—broke leg

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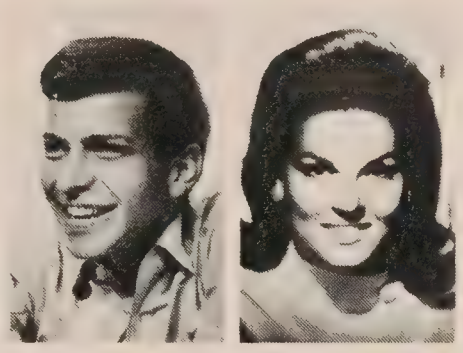

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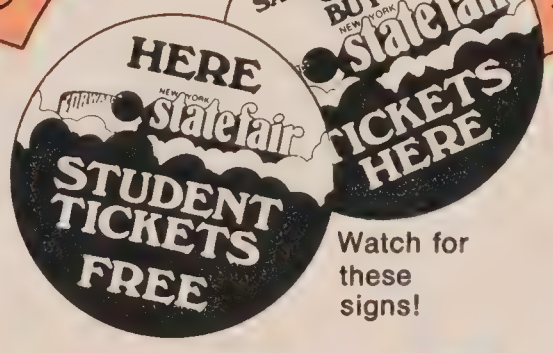

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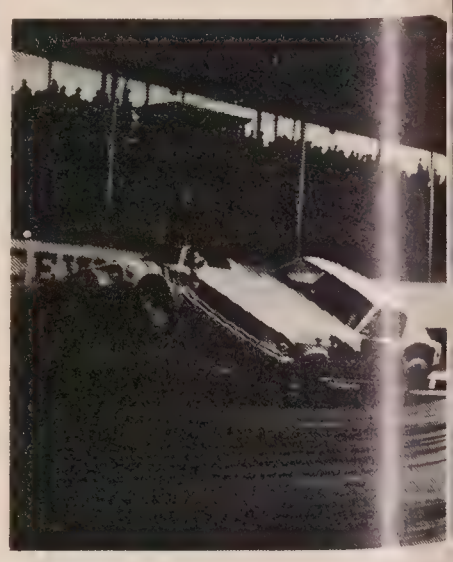

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For The Northeast Farmer

SEPTEMBER 1969

American Agriculturist

and the

RURAL NEW YORKER

American Agriculturist subscribers will be reading gardening material from George (Doc) Abraham of Naples, New York, beginning in the October issue. Doc and his wife Katy (above) are widely known for their newspaper columns, magazine articles, and radio programs.

NATIONAL AGRICULTURAL YOUTH INSTITUTE

SOME young delegates to the third National Agricultural Youth Institute had their expenses partially paid by the American Agriculturist Foundation. Last year cash grants went to delegates from New Jersey and Vermont; in 1969 delegates from the other seven northeastern states shared in the awards.

The National Agricultural Youth Institute, sponsored by Agricultural Careers, Inc. of Lincoln, Nebraska, is held annually to acquaint boys with opportunities in agriculture and agribusiness. Fifty-three Nebraska youths were selected as hosts to the 61 visiting boys from 44 other states. Each out-of-state delegate spent the weekend with his selected host.

Nutmeg State

Dale Merrill, Connecticut delegate, has been in 4-H for 9 years in beef and other agricultural projects. His home is in Plainfield, he is a member of the National Honor Society, and active in community affairs. He is interested in preparing himself for doing research in the cellular level of life, and in many kinds of science related to agriculture.

The University of New Hampshire sponsored Vaughn E. Stimson, son of Mr. and Mrs. A. Paul Stimson of Lisbon. Paul is a senior at the Lisbon High School, active in social and community affairs. In his 4-H dairy program he started showing at age 9, won the novice fitting and showmanship class, and went on to the State Fair.

In a letter to American Agriculturist, Vaughn says: "After showing in 4-H fairs with my dairy cattle for 7 years, this trip is a great climax to all these years of club work. But in a larger sense, this could be just the beginning of all the opportunities that await in the field of agriculture."

Empire State

Paul S. Kleinberger II, son of Mr. and Mrs. Paul S. Kleinberger of Sharon Springs, New York, represented his state. He was selected from among 12 applicants on the basis of his school and community activities, and his interest in agriculture.

Craig A. Chittenden, son of Mr. and Mrs. Stanley N. Chittenden of New Lebanon, who was chosen alternate, attended the Institute at his own expense.

In Pennsylvania, the American Agriculturist award money went to Harold A. Moyer, a 4-H leader in Lebanon County, Pa. He is the son of Mr. and Mrs. Albert F. Moyer of Lebanon, one of a family of seven. Harold has had 6 years experience in 4-H Club work, and he plans to enter either dairy science or agricultural engineering in college.

George Mello, Jr., Tiverton, Rhode Island, was selected to receive the $100 from American Agriculturist. George's main interest in agriculture is animal husbandry, particularly the study of breeding, diseases, and care of animals. He spends much of his spare time with horses, hoping to improve them and himself in the art of horsemanship.

Grants were also donated to the delegates from Maine and Massachusetts, but at press time we are sorry not to have their names and some information about them.

FOUR YEARS AGO WE ASKED FARMERS HOW THEY LIKED THEIR DAVID BROWN TRACTORS. THIS YEAR WE ASKED THEM AGAIN

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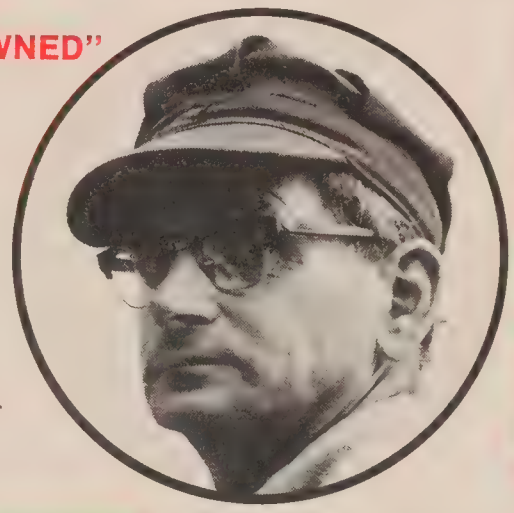

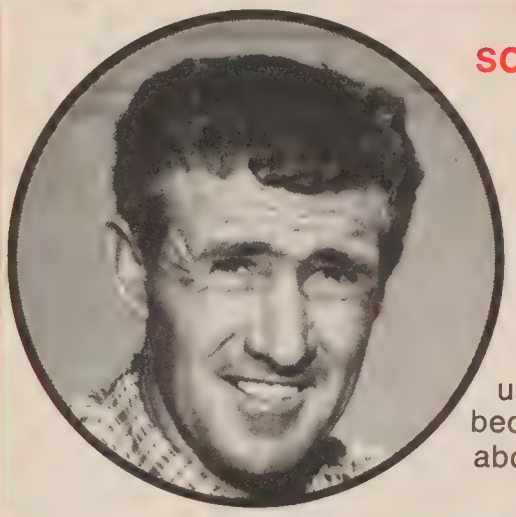

"I LIKED MY DAVID BROWN 990 SO WELL, I BOUGHT A 1200 TOO"
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"I use my David Brown 990 for planting and pulling my feed wagon. The 1200 I use for plowing, discing and tilling with a seven foot rototiller 12 inches deep. In fact I put 197 hours on it in just two months. David Brown Tractors use so little fuel that I sometimes run out because I forget to refuel. I like everything about the David Browns and can't think of one fault with them."

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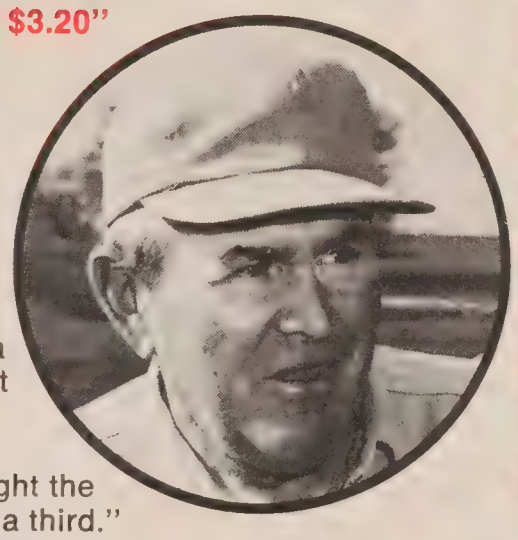

These are just a few of the many favorable reports we received in a personal interview swing around the country. No wonder we call David Brown Tractors "The Convincers."

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For The Northeast Farmer

Vol. 166, No. 9

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OUR COVER

Harvest time is not ended, but here and there preparations are already being made for the next planting that the rolling seasons will surely bring. Fall is surely one of the most pleasant times to farm!

Our photo is courtesy of Massey-Ferguson, Inc.

"RIGID•RIB® roofing and siding let me farm instead of fix."

How's that?
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How about RIGID•RIB for your next building?
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Raymond Becker, dairyman in Decatur, Indiana, comments on Republic RIGID•RIB galvanized steel roofing and siding. Available in plain galvanized, or prepainted in six colors. Ask your builder or dealer for RIGID•RIB.

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VEGETABLES

by Amos Kirby
New Jersey Editor

THE SUPERIOR POTATO has come to the front in New Jersey and is neck to neck with the old standbys, such as Katahdin and Chippewa. Plantings this year represent close to 30 percent of seed sales in some areas.

Growers like the Superior. It is as early as the Cobbler, long the favorite, and has a high solids content that meets the requirements of the chippers. A few years ago, South Jersey lost the chipper market due to low solids content of some other varieties, and the Superior fits nicely into that fast-reviving market.

Superior has excellent table qualities. Not as large as the main season varieties, it is better suited to consumer packaging, and its round shape and shallow eyes have consumer appeal.

LARGER ONION YIELDS

Soil fumigation and direct seeding look promising to South Jersey onion growers. Yields of 800 fifty-pound sacks per acre have been grown this year where the soil has been fumigated for nematodes. Direct seeded fields, while a bit later in harvesting, yield on a par with sets.

Advantage of seed over sets is cost of planting. Seed costs about $24 an acre, while cost of sets is over $100 an acre. Where there is proper weed control, soil fumigation, and adequate irrigation, 1000-sack yields are now the goal.

PLASTIC FARMING

It looks as if plastic farming is here to stay. Not all problems have been solved, but so far the deal looks good.

Another successful year with plastic houses for growing early tomatoes has been reported and other growers are taking a serious look at the venture. Customers prefer the plastic grown fruit. Price is of secondary importance and the market has absorbed the entire crop.

Cantaloupe seed grown in pots in plastic houses, then transplanted with sheet plastic placed on the ground, means earlier and better melons. The fruit develops no rind diseases due to wet weather, yields have doubled and trebled, and prices have been at a premium.

Sweet corn planted under plastic has hit the market two weeks earlier than corn grown in the open. Extra advantage . . . the better mid-season varieties reach the market and command a premium over the early varieties that lack both size of ear and depth of grain.

Black plastic used in growing table squash has increased soil temperature by as much as 10 degrees, resulting in an earlier harvest, higher quality, and longer life of the vines due to moisture conservation.

CRACKED EGGS

To a consumer, a cracked egg is a cracked egg; to a producer or candler, it can be an almost total loss. So producers want to know, "What caused that egg to crack?"

New Jersey poultry specialist Charles Dupras, reporting on research at the University of Maine, lists three types or classes of cracks . . . thermal, pressure, and impact.

The thermal type, which is characterized by a forked crack at the terminal end, is the result of a large and rapid change in temperature of the egg, as could happen during washing.

Pressure cracks may occur during the use of vacuum lifts, or from expansion as a result of freezing.

The impact crack shows up as many small cracks radiating from a central point or area, something like the spokes in a wheel.

By examining the cracked shells, poultrymen may narrow the list of possible causes, and remedy the problem.

ROADSIDE CLERKS

College of Agriculture staff member Morris Fabian has some good points on increasing roadside market sales through a training course to develop more efficient clerks.

1. It's not what you say, but the way you say it, that builds sales.
2. Think of what you say from the customer's point of view.
3. The "you" attitude is the key to your approach. "I" statements are taboo.
4. Never assume your knowledge is superior to the customer's, even though you may be correct.
5. Don't show disappointment at the loss of a sale. Analyze why the sale was not made. Leave the door open for the future.
6. Don't interrupt another sales person who is waiting on a customer.
7. Build confidence and good will.
8. Never knock competition even if the customer mentions it.
9. Don't talk too fast.
10. Be alert; don't slouch or assume an awkward position.
11. Get the customer's confidence.
12. Remember the customer is boss.

SOIL pH

If you're planting alfalfa this fall, the soil pH should be between 6.5 and 7.

Many growers believe that the pH can be brought up by applying lime just before seeding, but this may or may not be the final answer. Latest recommendation is that lime should be applied at least two months before seeding for it to become effective. If the two-month waiting period is not available, apply the lime this fall and wait until next spring to sow the seed.

FOWL MARKET

New Jersey poultrymen are taking a close look at the operation of the Farmers Agricultural Cooperative Trading Society ("FACTS"), a New England organization that provides a market for "spent" fowl. A group of poultry producers in the Garden State recently conferred with the Farm Bureau to authorize a further study of the New England program.

New Jersey lacks a stable market for spent fowl, and existing markets are limited in their capacity to handle any large number at one time. By organizing, growers believe that they can market their spent birds more economically and at a more uniform price. Look for some decision during the coming months.

COATED SEEDS

Look for a substantial increase in plastic or vermiculite-coated seeds used by vegetable growers in 1970. Big advantage is more precision planting. If pelleted, such small seeds as carrots, celery, pepper, onion, endive, tomato and lettuce can be placed in rows in a more accurate pattern. Growers also report less seed required, a reduction in hand or hoe thinning and a more uniform stand.

POULTRY WASTES

Data on poultry house wastes as a source of soil fertility is presented by Dr. Roy Flannery, soils specialist at the New Jersey College of Agriculture.

Soil waste disposal is fast becoming a problem discussed by health, agriculture and environmental groups. It will sooner or later face even dairymen. Here are some facts from a recent Flannery report:

- A 100,00-bird flock produces 3600 tons of waste material annually.
- On the basis of 100 pounds of nitrogen for maximum crop production, this is sufficient for 700 acres of agricultural land.
- Crops that may be grown on and fertilized with large amounts of poultry waste include most vegetables, sweet and field corn, sudan grass, and others.
- Organic matter content of poultry house wastes varies from 1500 pounds of oven-dry material per ton to 750 pounds in a 50 percent water mixture.
- Time of application to the soil determines its value as a source of plant food.

Although the Flannery report goes into detail on the plant food and organic matter angles, it's the grower who has to face the economic angle . . . the cost of commercial plant foods versus the costs of handling the waste material. High labor costs in spreading poultry wastes have discouraged many growers from using it.

The report does, however, present important facts as the soil waste issue looms ahead of health agencies attempting to solve many kinds of waste disposal problems.

"I've been flirting with him all day and he won't give me a tumble . . . must be made of iron!"

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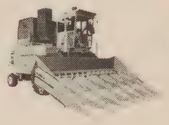

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The U302. 55 hp 220 cu. in. engine. A workhorse. Great on economy and reliability. Low on repairs and maintenance.

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Bob Burns adjusts mechanical cleaner on bulk tank. It takes 60 gallons of piping hot water to wash this 2000-gallon giant.

BIG TANK

There aren't many 2M-gallon bulk tanks on dairy farms in the Northeast . . . one is located at the Burns Brothers place near Bovina Center, New York. Bob and Jack Burns operate 800 acres (300 tillable) on which is a herd of 150 milking cows (250-300 head of cattle in all).

A recently-completed barn (44×308 feet) has 152 free stalls, features laminated rafters that make it a free-span structure with no interfering posts. It's open along the sills on both sides, and also open at the peak . . . so air can flow in at the base, along the roof, and out. One problem . . . a winter like that of 1968-69 can bring so much snow that the sill openings are covered!

Barn Raising

The Burns families had a barn-raising during which neighbors helped "raise the roof." Most of the rest of the construction was done by Jack and Bob, along with their one full-time employee. These three make up the labor force here, along with a high-school boy during the summer.

Two men can milk 115-120 cows during 2 to 2¼ hours in the double-six herringbone milking parlor. In winter, it takes 2½ to 2¾ hours to milk 135-140 cows. Weigh jars are used in the milk lines. Latest average production was 12,000 pounds of milk, and 432 of butterfat.

Silage is stored in a 30×60 upright, and also in a trench holding 1200 tons. There are 110 acres of corn being grown in 1969.

Electric power

The barn is wired with a 400-amp service . . . bringing power to two 200-amp circuits at the barn. A 15-kilowatt auxiliary generator (pto operated) stands by for emergencies. The parlor has electric heating mats in the floor of the pit, and also quartz electric heaters overhead.

Bob and Jack bought some heifers to enlarge the herd commensurate with the larger barn, but had some problems with shipping fever. The purchased heifers were not isolated for a few days when delivered, and the entire herd was exposed. A couple cows died, and two more lost their calves as a result. Bob reports that this cured them of buying heifers; they plan to raise their own in the future!

Another management problem area has been the AI conception rate. The Burns are delaying breeding until 24 hours after first detection of standing heat . . . figuring that heat is seen earlier in a free stall barn than in conventional stabling, and that they may have been breeding too soon.

The milking herd is in the barn at all times, does not ever go out to an exercise lot. Dry cows, however, are pastured. —*G.L.C.*

L. R. Brown with some freshly-picked berries.

BERRIES, BERRIES, BERRIES

Driving from Owego, New York, toward Nichols, my eye caught a sign with an arrow which read, "Brown's Berry Ranch." Tioga County is not noted as a fruit producer, so I decided to investigate. I was well rewarded.

Owner L. R. Brown was, up until the time of his retirement, an electrical engineer in Syracuse.

"While living there," he said, "I grew raspberries for 15 years as a hobby. Then in 1950, I bought this place and began to set out raspberries. Some are still bearing, and I have around 15 acres of blacks, reds, and purples . . . about every good variety grown.

"The producing life of a patch depends on many things." he continued, "but mostly on the care you give it. However, I have some acreage I am planning to pull out and replant."

I asked about customers. "Yesterday," said Mr. Brown, "we had at least 50 cars here in the forenoon and most of them had a full load of people. I don't pick any. It's all 'pick-em-yourself' and I don't change the price; it's 35 cents a quart."

He runs an advertisement in an area "Pennysaver" about two weeks ahead of picking time . . . and another when berries are ready to pick.

Mr. Brown hires no help. He and Mrs. Brown take care of customers and he does the field work. I asked about disease. "I rigged up a sprayer once," he answered, "but I didn't see that it helped, so I quit spraying."

I didn't have too much time, yet I grabbed a 3-quart pail and spent a half hour picking black raspberries.

As I left, Mr. Brown said, "Come again!"

I expect to take advantage of his invitation! — *H.L.C.*

SILAGE FEEDER

Bernard Blinn of Candor, New York, has lived all his life on the present farm of 330 acres. For the past 15 years he has been the operator.

For a farm with 55 milkers, and with enough heifers to increase the herd to 70, the farm has a small labor force. Man equivalent is figured at two, including help from Mrs. Blinn, a thirteen-year-old son, and some help from high school boys at silo-filling and other rush times.

The latest labor-saving device is an automatic silage feeder, reported to be the only one in the region, which is installed in a stanchion barn.

"I have been thinking of some kind of automatic feeding for several years," said Bernard, "but it was only last year that I learned of this brand. I saw the local dealer and they sent a man here, and I bought it.

"I already had an automatic unloader, but now I have a new one which is transferred between two silos, each 16′×40′.

Two feeder units each feed 35 head of stock on each side of the barn; they can feed 50 to 60 pounds of silage per head in 30 minutes. It can be fed all in one large feeding once a day, or in smaller feedings throughout the day.

I asked about cost of operation, and the reply was approximately a dollar a day, which is cheap help.

The feeder can also handle grain, but Bernard feeds cows as individuals and uses a feed cart. Hay is baled.

As is the case with most dairymen, the cows have something to eat most of the time. Unlike many farms, the herd is on improved pasture in summer, but when pasture gets short they are fed hay or chopped corn. Pastures have been seeded (some to birdsfoot), fertilized, and in some cases manured.

As already mentioned, cows are in stanchions. A transfer system takes the milk to an 800-gallon bulk tank. — *H.L.C.*

SLOWING DOWN

There are several ways whereby a farmer can slow down with the advancing years. One way is to turn the farm over to the next generation. But this isn't always possible, nor necessarily entirely satisfactory.

Harold Chamberlain of Jordan, New York, has solved his problem in an interesting way. He and his brother ran a dairy with Guernseys on the farm bought in 1929, "right in the big depression," he remarked.

Now he grows 3,000 pullets a year for a hatchery. The hatchery furnishes the chicks and Harold supplies feed, housing and labor and the hatchery buys the pullets when they are 20 weeks old. They are raised on the floor and heat is provided by a hot water brooder using gas.

Then in the fall, Harold buys a dozen Holstein calves to raise, and sells them when they are ready to freshen. "Prices are good," he commented; a fact of which buyers are well aware!

I asked about the problems involved in raising pullets. "Piling up in corners is the worst," he answered. However, when I saw them, they were three weeks old and only three had died! — *HLC*

FIRE FORCED CHANGE

A fire on March 30, 1968, which burned a barn housing part of a milking herd of 110 cows, posed a real problem for Orrin Pendell of Lisle, New York. After visiting several farms with a free-stall setup, he built a similar barn with a capacity of 170 head.

Orrin Pendell

"Before that," said Orrin, "I was in partnership with my father and a brother, but last year I bought their interest. When I bought, a brother and I were partners with milkers in two barns. We each had a full-time hired man.

"When one barn burned, I didn't have room for all the

(Continued on next page)

milkers. I crowded 80 in a barn intended for 60, sold the balance and bought around 70 heifers."

Orrin's father was a carpenter as well as a farmer and he helped with the barn construction. Four additional men did the farm work and the barn building. The barn was started in May 1968 and finished in September.

"Now I have two full-time helpers and the three of us take care of 130 milkers where, before we built, four men looked after 110. Next year the herd will be some larger. Labor saving is the big advantage of a free-stall setup."

Adjacent to the barn are 2 silos, each 24×60, one holding haylage (mostly birdsfoot trefoil) from 200 acres, the other corn silage from 115 acres.

"We are growing 40 acres of oats, but grow them only for seeding birdsfoot," said Orrin. "We combine our own birdsfoot seed and sell a little occasionally. We seed meadows only when needed (every 5 to 10 years) and the cows have no pasture. We greenchop for summer feeding, beginning with hay. We also chop 6 acres of Sudax."

Total acreage is 1500 with around 600 being tillable. — *H.L.C.*

FLOOR BIRDS

Harold Tank and his wife, Marian, grow 11-13,000 pullets at a batch (3-4 batches per year) in a windowless rearing house at their 64-acre farm near Newark, New York. At present, they're sending them out at 10 weeks of age . . . to spend their last 10 weeks in cages before egg production begins.

The building is 40×100 feet, and has two floors. Exterior plywood forms ceilings and walls, inside and out . . . insulation is 3 inches thick in the sidewalls, 6 inches in upper ceiling. It was originally built for 4000 birds per floor for a 20-week growing period.

Air Intakes

Four air intake slots are built lengthwise of the house . . . two each for top and bottom floors. Ventilating fans exhaust air on the east side only of the north-south building. An auxiliary pto-powered generator (10 K.W.) stands by for emergencies.

There are 10 hovers per floor (bottled gas heat), each 5 feet in diameter. At first, chicks are restricted to the hover area.

For the first few days after chicks arrive, light bulbs providing considerable light are used . . . later changed to 15-watt bulbs, 3 rows per floor, rows 10 feet apart, and bulbs spaced at 15-feet intervals in the row. Birds are dubbed and debeaked at day-old, but lowered light intensity enhances prevention of cannibalism. Light cycle is 8 hours on and 16 off.

Mash is fed from 119 tube-type feeders per floor, each suspended from floor joists or rafters. Feed is augered from bulk bin into a regular barn litter carrier that runs on a track around each floor. Two waterers (each 70′ long) are located on each floor.

Roosts are in 8×10-feet swinging sections (8 per floor), are also suspended from overhead. Litter is chopped straw. Simple triangular-shaped devices made up of steel rods and ¼-inch mesh form anti-pileup guards at all corners of both floors.

When birds are 10 weeks old, all feeders and waterers are hung up out of the way, all lights turned off, and the catching begins! As each roosting section is cleaned off, it too is removed from the area where the action is.

Between batches, all litter is cleaned out . . . with a full-size tractor equipped with front end loader on the first floor, and by a 12 h.p. garden tractor (also with loader) on the top floor. Harold built a hydraulic lifter, by the way, to handily boost the smaller tractor to the top floor.

Then an air compressor blasts hard-to-reach dust out of the nooks and crannies and all waterers and tube feeders are **hand** scrubbed in disinfectant. This is followed by a disinfectant spray, and topped off with an insecticide-disinfectant mist from a fogger. After that, the place is **squeaky** clean!

The Tanks are integrated with Glor Hatchery of Holland, New York (DeKalb chicks) . . . and with Purina, which supplies feed, and provides fieldman consultation. Payment to the grower here is by the batch, not according to number of birds delivered at 10 weeks of age.

Harold and Marian had not been in the poultry business when they started rearing birds 3 years ago. They provide the building and labor, are able to leave all the marketing worries to someone else. As with an increasing number of starting specialists over the Northeast, they grow thousands of chickens every year . . . and buy their eggs at the grocery store! — *G.L.C.*

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Doc Mettler Comments On:

TURN ON THE WORM!

WHEN you see the corn leaves blow out straight from a cold north wind, and there is a full moon due, you know that when the wind stops and darkness falls the temperature will also fall, and by morning the corn should be white with frost. When you see your younger heifers coming off pasture this fall thin and hardly bigger than when you turned them out in the spring, you should know they may be full of worms.

Up until a few years ago, farmers in the Northeast didn't think about worms in cattle. Their neighbors with sheep wormed their animals; their wives took the dog to the veterinarian to be wormed . . . but worms in cattle? Well, the worms are here, and each year there are more of them.

The only way to be sure whether or not your cattle have worms is to have your veterinarian run a test on the suspected animal's manure. In some parts of the country, the Deep South in particular, cattle are wormed as regularly as we worm sheep in the Northeast. But since for generations we have been taught that the South had all the cattle worms and we had none, we have ignored the wormy heifers . . . and cost ourselves thousands of dollars.

As you probably know, most internal parasites in cattle are spread by worm eggs in the manure contaminating the ground where they are eaten by grazing cattle, and infest (or reinfest) the animals. If the pasture is not rotated, and is heavily used each year, the number of worm eggs in the soil increases. If the pasture is plowed, reseeded, and left for one or two winters, chances are no eggs are left. If wormy cattle are again turned in on the clean ground, the same thing starts all over.

Several Types

Cattle can be infected with one or all of several different types of worms here in the Northeast. The small stomach worms (trichostrogylus axei) are the most common. There are also two large stomach worms.

Lung worms are seen on certain farms, but usually only when other worms have already weakened the animals. Tape worms are seen on occasion . . . one type can, by a complicated life cycle, affect man. They could be a serious threat, but usually are not. The usual procedure is to get rid of the stomach worms and not worry about the others.

The typical wormy heifer is stunted and thin, has a poor hair coat (she may not have lost winter hair yet), and is apt to have diarrhea. The idea is to spot the wormy animal before it gets this bad. Any time you have a slightly "poor doing" animal, when no other reason can easily be determined as the cause, have the manure checked. Find out from your veterinarian what he recommends to use as a remedy, routine repeat treatment and control for your particular conditions.

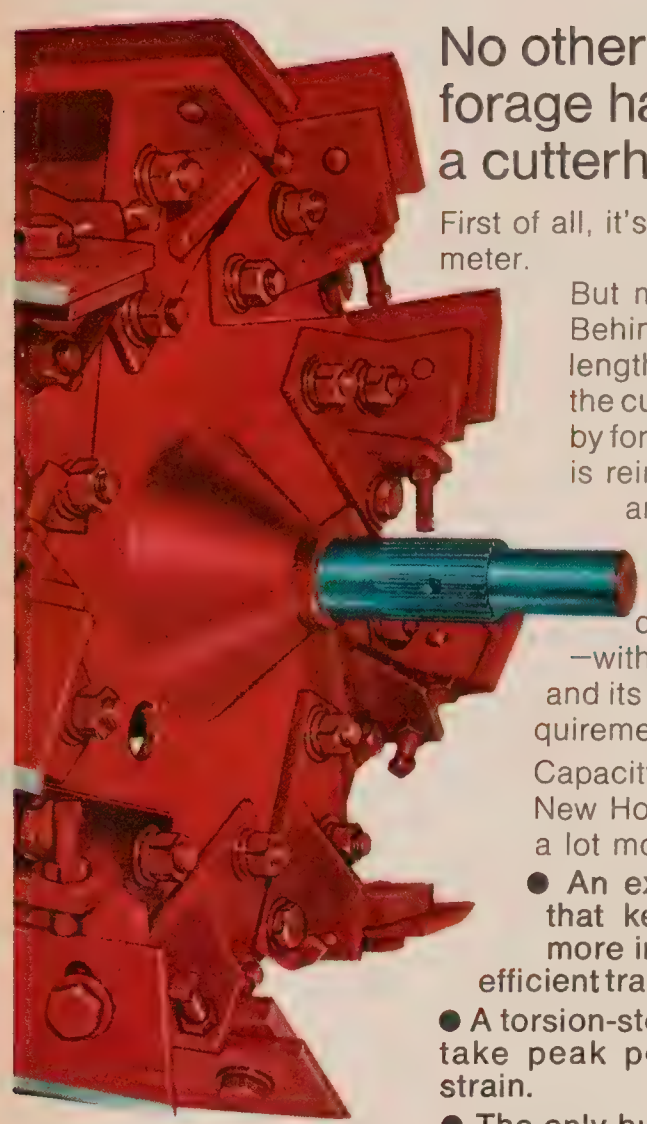
Don't Guess

Under no circumstances should worm remedies be given to cattle without knowing for sure if worms are present, and if symptoms persist after worming more tests should be made. Thousands of dollars are wasted by indiscriminate worming. Worm remedies can be put in the feed, but the first time through . . . and at certain intervals during the year . . . the herd should be wormed with a dose syringe so you know **for sure** that every animal below maturity has been given enough.

As yet I've seen no mature cattle in this part of the country so bad that they need worming, but I've heard that they do exist. However, a mature animal with no external symptoms of worms

(Continued on next page)

This big edge inside gives you a big edge outside.



Note the exclusive steel cone that gives extra support where shaft joins side plate.

No other like-size forage harvester has a cutterhead like it.

First of all, it's big: 24 inches in diameter.

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It adds up to a hard-working machine. Whether you're chopping corn silage (with a 1-row, 2-row or 2-row narrow head) or haylage (with the Super-Sweep windrow pickup) or standing grass crops (with the all-new sicklebar attachment).

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Super 717 Forage Harvester: All corn heads have spring-loaded idlers that make it easy to keep gathering chains tight.

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"That proves it! I told you they aim their comedy show at a mighty low intelligence level!"

Food For The Spirit

by Robert Clingan

THE SEARCH FOR A PAST

During the month of June, 1969, the British people went through the elaborate ceremonies of "investuring" the heir to their throne, Prince Charles, with the title of "Prince of Wales." The ceremony was centuries old, but all its history put together was never viewed by as many people as saw it this year, thanks to modern communications via satellite.

No expense was spared to share this show of ancient ceremony with the entire world. When technical difficulties kept it from being televised across the Atlantic, the picture was sent around the world the other way . . . and in the picture was all the pomp and pageantry of ancient story . . . even to the presence of the so-called "Beefeaters."

What does it all mean?

Many white persons have been shocked and dismayed by black student demands for black study courses in college after college. It is hard for us to understand why so many black militants in our cities prefer African hairdo's and African-styled clothing for their everyday attire. Some of us wonder whether or not they are actually creating myths about a great African culture from which their slave ancestors were cut off and they themselves were deprived. What does all this mean?

There are organizations and even profitable businesses set up to furnish people researched information on their family history and, for a fee, a family coat of arms. Scottish friends of mine have proudly shown me their tartan, and identified the clan from which they inherited the right to wear it.

Is there a connection among the three illustrations . . . an English heir becomes a Prince of Wales; a Negro American seeks to discover and develop African culture; and an individual traces out his family tree and displays emblems related to it? I believe there is.

In each there is a search for identity . . . by exploring the past and discovering the root of one's life in history.

The Bible speaks to that need, first of all by saying that the God who comes to us and calls us is the God of Abraham, Isaac, and Jacob. In the New Testament Christians are told they enter into that heritage, and all the history of the chosen people becomes their history, for they are the New Israel.

The New Testament is quite explicit . . . it says in I Peter 2:9, "But you are a chosen race, a royal nation, God's own people, that you may declare the wonderful deeds of Him who called you out of darkness into His marvelous light. Once you were no people, but now you are God's people."

And again, the Apostle Paul wrote in I Corinthians 3:21-23, "So let no one boast of men. For all things are yours, whether Paul or Apollos or Cephas or the world or life or death or the present or the future, all are yours, and you are Christ's; and Christ is God's."

We are to enter into the joy of our heritage, for the story of God's people . . . in both the Old and New Testaments . . . has become **our** story. These are our roots, men and women of faith, members of the beloved community, ordinary people like those in the Bible called to be children of God.

The New York State Conservation Department invites all vacationers and residents to visit their nearest fire tower. You'll learn about the Bureau of Forest Fire Control's efforts to protect our woods . . . and enjoy a memorable view.

Mettler . . . . .

(Continued from page 8)

can carry the eggs to clean pasture and infect a worm-free farm. Remember this the next time you buy a bull to put with your heifers, and have his stool checked along with other tests before you turn him to pasture.

Phenothiazine, thiabenzole plus phenothiazine, and other chemicals in combination, are the most common worm remedies for cattle.

The most important thing to remember about worms, in cattle or any other species, is that once they are found on a farm you can never consider your cattle out of danger. Once you find them and worm your herd, don't stop there. Ask your veterinarian to set up a parasite control program for you and don't ever let it slip.

The frost will come, and we can't do much but hope it is late, but the worms **can** be controlled. Don't let them ruin your herd!

The weather. The yield. The livestock. The prices. You've got enough to do, just thinking about today. And tomorrow. But somebody's got to worry about what happens *years* from now. Farm Family is doing that for you.

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FOR ONE OR MANY

Electricity and dogs . . . agricultural economics and rural sociology . . . dairy science . . . all aspects of home economics . . . horticulture . . . these are just a sample of the subjects covered in the Pennsylvania State University correspondence courses. There is even a special interest group which ranges over such subjects as bacteriology, rabbit production, weather, parliamentary procedure, animal hygiene, fallout protection, etc., etc.

Reddy Kilowatt

For example, what do you know about the electricity that works for you? To be sure, there's a clock on the wall, a reading lamp or several of them, a refrigerator keeping your food fresh and wholesome, and electric motors on the farm. Those are things we take for granted most of the time.

The Pennsylvania University course tells how to control electricity, discusses practical problems, and eliminates the so-called "mystery" of the subject. It is not a course on the how of farm and home wiring . . . but on the why of adequate wiring size, proper grounding, motor selection for the job, and other problems.

Modest Cost

This particular course costs $4.25; others cost less. In all, the University offers 79 correspondence courses in agriculture and 18 in home economics. It's a good method for people who find it inconvenient to leave home and attend classes on college campuses.

The material is intended to meet the needs of people at home, on their jobs, on farms, and in their gardens. There are many instances where people get together to study the same course, and have group discussions.

For further information, write to: Correspondence Courses, The Pennsylvania State University, 202 Agricultural Education Building, University Park, Pennsylvania 16802.

NEW WILDLIFE AREA

Some 3,700 acres of land along the Moose River near Lyonsdale (Lewis County) New York, which includes some of the finest brook and brown trout water in the Empire State, has been placed under a Fish and Wildlife Management Act Cooperative Agreement by the Niagara Mohawk Power Corporation. Deer, snowshoe rabbits, grouse and other forest game species also inhabit the area. Permits will not be required for users of the new cooperator area.

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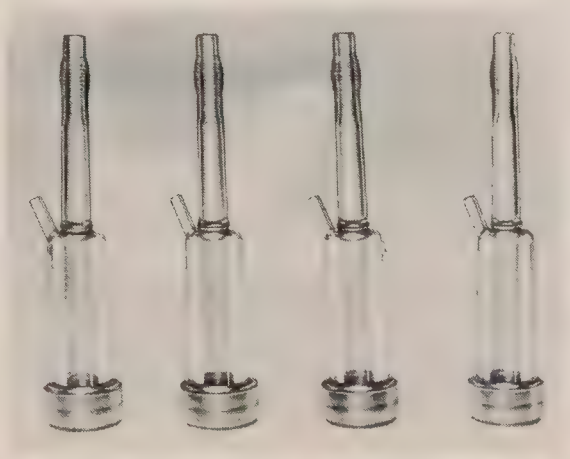

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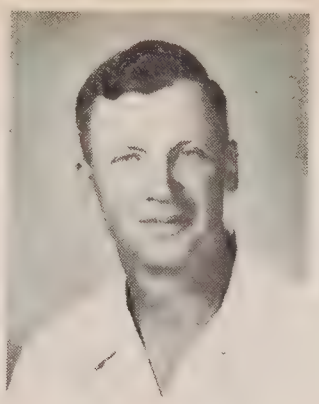

Gayway Farm Notes

by HAROLD HAWLEY

INSURANCE

One of the many violent storms this summer took off a portion of the roof on one of our barns. The insurance folks replaced it. The incident got us interested in reviewing our coverage on all our buildings. We had done this within the past two or three years and had updated the coverage, but with inflation progressing hell-bent and non-stop, insurance coverage gets out of date almost as fast as milady's dress styles.

What a tragedy to suffer a big loss and find that the program which was pretty good a few years ago will not nearly replace the buildings which just now burned down! It's best to review our insurance coverage at pretty regular intervals unless and until this inflation is somehow ended . . . and in spite of all the talk about control measures, we can see mighty little evidence that it is not going to continue.

PERMITS

Meet the new man! For years it has been common to tell those of us in agriculture that we must organize to compete or deal effectively with such giants as big government, big labor, and big business. The advice is still sound; only the characters have changed. Big government now has a new champion which should be recognized as a very powerful force now and for the future in affairs that concern farmers.

I refer to the New York State Conservation Department and to the Federations of Sportsman's Clubs, both supplying the legislative support and muscle for things in the outdoor recreation-conservation area. In calling attention to the Department and its programs, I do not necessarily cricize or condemn, but point out that we had better recognize this well organized and financed force, and learn to work with it.

The alternative is a series of confrontations between conservation and agriculture.

Trespass Law

One of the real unsatisfactory situations in this state is our trespass law . . . or rather, the **lack** of any really effective trespass law. Any farmer has had countless experiences when others assumed they had inherent rights on his property because it wasn't posted. Now most of us feel that our farmstead and lands are private property not subject to uninvited entry by others to hunt, fish, ride horses, pick berries, ride a motorcycle through the wheat field, or whatever. The genius who brings agriculture and conservation people together on this issue will deserve a fur covered medal.

Some farmers have found out the hard way that while we busied ourselves on other matters, the Conservation Department folks pushed through a little legislation having to do with "wetlands." The power of government to condemn property for roads, etc., is not new, but who would have thought that he would wake up some day to find that his marshland had been taken over by the conservation people?

We have made a little progress over the years in getting the State Highway Department to consider farmers' business problems when they locate rights of way, and in their methods of appraisal and payment. Judging by some reports, we start all over again on this "wetlands" bit. This one apparently needs a full-scale study.

Pollution

It has lately become fashionable to be concerned about pollution in all its forms. Pesticide residues, of course, constitute one of the many pollutants. Conservation folks seem bent on trying to convince one and all that any problems associated with wildlife had their genesis with pesticides.

Some of us are just not convinced by some of the "research" results they have come up with. We note with some interest and alarm that various pseudo-scientific publications seize eagerly on such material as a basis for articles beamed to the general public. Occasionally we hear someone admit that there were cases of declining numbers of this or that species way back in 300 B.P. (before pesticides). Generally, however, the public has no trouble in concluding that pesticides are the real villain.

A Real Jolt

I may as well tell you that it was a real jolt to hear several witnesses testify before a hearing of the House Committee on Health, at Buffalo, as to their feelings about pesticides . . . particularly agricultural pesticides. This jolt was mild compared to the next one. The chairman of the State Pesticide Commission was questioned about the desirability of having more members on the Commission. He finally agreed that he had no objection to adding someone from Conservation! But never a suggestion from him that he thought agri-

(Continued on next page)

culture should have a loud voice on this important commission. It would seem that someone screaming about pesticides and wildlife had been heard loud and clear.

All I'm really trying to do is suggest the need and desirability for all of us to see it as it is, and to formulate plans to work for mutually satisfactory solutions to the many unsolved problems in the relationship between farmers and the increasing numbers of non-farm people with whom we must learn to live in peace.

THE GREAT COVER-UP

For several weeks cornfields all over our area had embarrassing stretches of yellow plants. While most of the field might be doing well, those wet spots continued to do poorly and look bad. Suddenly, the whole picture changed. A few days of sunshine and some warm nights in July and the color finally began to darken. Corn plants shot up several inches a day. The whole field began to look like something.

Why? Partly because of the above things, but possibly even more because the taller corn shut off the view of the still sick-looking wet spots. Some of them just won't look good until next year!

An airplane ride gives one the picture of how few fields will be uniformly good this fall. Even though the bad spots are less visible now, their influence will be reflected in the average yield figures.

Hope springs eternal, though, and given some better weather we'll still have a crop. With corn and soybean crop prospects across much of the country below normal and with livestock prices pretty good, we can't see how grain prices can keep from rising next year.

Every farm has its own peculiar setup as regards feed supplies. Some buy all their grain and protein and some buy roughage in addition. A few in our area sell hay or grain or both, and buy only protein supplement. We are in this latter category. If our guess is halfway right about crop prospects and prices, we should be holding back hay and grain for sale later, and contracting ahead for the coming year's supplies at this summer's prices or as near to that as possible.

It takes a bit of courage to commit oneself to an advance-buying program even if it involves . . . in our case at least . . . less money than the hay and grain we will sell. The big difference lies in the fact that we have the hay and grain on hand and are used to guessing on the market. Right or wrong, we decide each year whether to hold or sell the crop at harvest.

Buying protein ahead is a rather new type of decision-making. Certainly it's no more of a gamble than we already take with our own crops. Just one more way to increase income if we do it right, and to get more gray hairs if we don't!

VACATION TIME AGAIN

Last summer, son Bruce was married in early August and, of course, was away for a spell. This year it's our turn to be away for a couple of weeks. We've been having all the fun of reading maps, figuring distances, and trying to decide what we can or should try to see enroute.

We plan to visit Doris' parents in central Wyoming. Some of our favorite scenery lies through the Niobrara River valley in northern Nebraska and on into the fabulous Sand Hills cattle country. In addition, of course, we want to see a couple of farms we've heard about. It becomes a matter of compromising between all the places we would like to go and see. We want to catch a rodeo somewhere in the West, and so on and on.

We watch folks from all over go by here on their vacations. Some travel light, eat out, and stay at motels, but increasingly, it seems, folks take their homes with them . . . campers, trailers, or tents. We have no interest in hauling a trailer . . . even if we had one . . . as far as we will be going.

What one travels in or where he stays isn't as important as the fact that he gets away, forgets the business for a while, and gets reacquainted with his family in a wholly different situation. Last but not least, the recharging of our batteries . . . both physical and spiritual . . . can be most worthwhile.

CROWNVETCH

Some time ago we commented on our poor results with crownvetch seed planted a year ago. This summer much of it has grown from last year's seeding and part of our bank has been a solid mass of pink blossoms for some weeks now. It's most rewarding to have the erosion controlled on the bank, to have the weeds pretty much out-competed, and to have a beautiful bunch of blossoms to view at every mealtime. From all appearances, it will continue to spread along the bank, requiring little or no care and will be a "thing of beauty and a joy to behold." We will put on a bunch more seed this fall to hurry the day when the whole bank is solid with it.

The crowns we set this spring are going to make the grade. The seed is, of course, the less expensive way to get started. Guess we were just too impatient with our first seeding. At any rate, it's a nice way to beautify an area.

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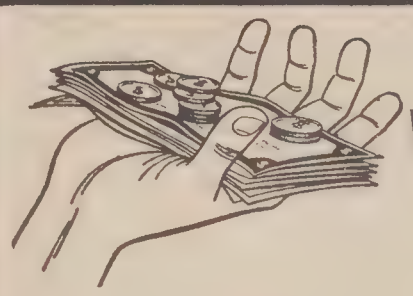

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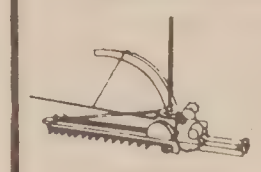

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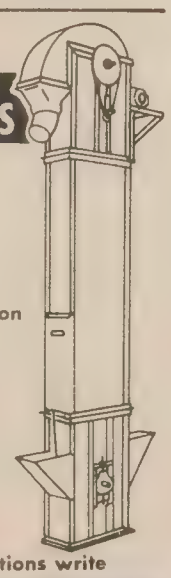

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All Aboard — you have a choice of traveling to the West Coast by train or by air. Those choosing to go by train will leave Chicago on January 11 aboard the California Zephyr; those who fly will leave home January 12, stay overnight in Chicago, and fly to San Francisco the next day. Both groups meet at the Sir Francis Drake Hotel and go together to famous Fisherman's Wharf for a delicious seafood dinner.

San Francisco — America's "most interesting city" is the first highlight of our trip. Sightseeing here will include Twin Peaks, Seal Rocks, Golden Gate Park, Chinatown, and beautiful Muir Woods, a 485-acre tract of redwood.

California — We travel southward along the famous Seventeen Mile Drive and the Coast Mission Trail. At Pacific Grove, we see the unusual Butterfly Trees which are covered with Monarch butterflies from late October to March. We also visit Hearst Castle, said to contain 50 million dollars' worth of art treasures and antiques. Another attraction is the lovely little town of Solvang, a bit of Denmark transported to America.

Death Valley is a favorite spot with Southwest travelers, and here we find the lowest point in the Western Hemisphere — 280 feet below sea level. We will visit Bad Water, Devil's Golf Course, and Death Valley Scotty's Castle.

Las Vegas began as a sleepy desert town in 1905 and now is one of the most noted vacation centers in our Country. We'll enjoy the bright lights and night life before continuing to Hoover Dam where a Government guide will explain this amazing engineering project to us.

Grand Canyon — No matter how many times you may have visited Grand Canyon National Park, you will enjoy every mile of the East Rim Drive to Desert View, and photographers will be in their glory. Next comes Oak Creek Canyon and Montezuma Castle National Monument which contains ruins of prehistoric cliff dwellings of the Pueblo Indians, built in the 13th and 14th centuries.

Phoenix — Sightseeing in and around Phoenix will include the Desert Botanical Garden with its collection of plants from arid regions around the world, Arizona State University, and Scottsdale, a typical "old west" town.

San Diego and Los Angeles — Back in California we travel through fertile Imperial Valley to beautiful Bahia by the Bay resort in San Diego. Here we visit Sea World, Balboa Park, and the San Diego Zoological Gardens, one of the world's largest zoos. We stop at San Juan Capistrano to see the historic mission and go on to the magic kingdom of Disneyland.

In the Los Angeles area we'll visit Hollywood, Beverly Hills, Knott's Berry Farm (and enjoy its famous chicken dinner), Farmers' Market, and many other well known places. Doesn't this sound like a welcome break in our long Northeastern winter? We hope you'll send for the itinerary and plan on going to the Southwest with us in January.

Fall Weekend

We have arranged a Get Acquainted and Reunion Mixer Weekend (November 21 to 23) at the beautiful Lake Mohonk Mountain House in New Paltz, New York, for all our friends — old and new. Set aside this weekend now, so you can renew acquaintance with friends you've made over the years on **American Agriculturist** tours.

There'll be a sightseeing tour of the interesting New Paltz area; this will include the Hyde Park estates of Roosevelt and Vanderbilt and the stone houses built by the original French Huguenot settlers. We'll have a delightful travel film, and we're asking all our friends to bring along their best slides of former A. A. vacations, so we can reminisce and enjoy again the wonderful trips we've had together. Also, we will tell you about the tours we're planning for 1970. The all-expense cost for the entire weekend is just $69.00 per person.

Other Tours

There is still some space available on our Fall Foliage and Aloha Week in Hawaii tours, also on our fabulous Circle Cruise around South America, but we urge you to not wait any longer if you want to go on any one of these fine vacations — make your reservations today.

Gordon Conklin, Editor
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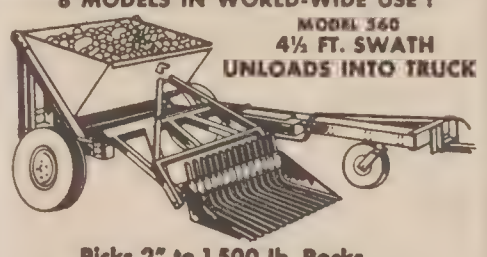

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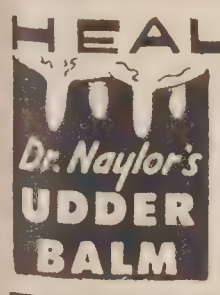

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Dates to Remember

Sept. 2-5 - Annual International Agricultural Students Conference, University of Delaware, Newark, Del.

Sept. 4-5 - 20th Annual New York Meat Animal Show and Sale, Empire Stockyards, Caledonia, N.Y.

Sept. 5-7 - 46th Annual Yorktown Grange Fair, Yorktown Heights, N.Y.

Sept. 6 - Maine Farm Day, Harland Bragg Dairy Farm, Sidney, Maine (rain date Sept. 7).

Sept. 9 - Vegetable Crops Field Day, Pennsylvania State University Research Farm, U.S. Rt. 45, five miles west of Pine Grove Mills, Pa.

Sept. 12-14 - 1969 Rally, Western New York Gas and Steam Engine Association, Alexander, N.Y.

Sept. 12-21 - Eastern States Exposition, West Springfield, Mass.

Sept. 19-21 - "SPICE" Annual Meeting, Top of the World, Lake George, N.Y.

Sept. 21-25 - Annual Meeting National Association County Agricultural Agents, Chalfonte-Haddon Hall, Atlantic City, N.J.

Sept. 22-26 - Pennsylvania All-American Dairy Show, Farm Show Building, Harrisburg, Pa.

Sept. 25-27 - National Poultry and Egg Marketing Conference, Hotel Ambassador, Chicago, Ill.

Sept. 27 - Open House (9:30-11:30 a.m.), new Animal Industries Building, Pennsylvania State University, University Park, Pa.

Sept. 29-30 - Third National Poultry Litter and Waste Management Seminar, Salisbury, Md.

Oct. 1 - 8th Broiler Housing Seminar, University of Delaware Substation, Georgetown, Del.

Oct. 4 - New York State Guernsey Sale, Canandaigua Sales Pavilion, Canandaigua, N.Y.

Oct. 5-11 - National Fire Prevention Week.

Oct. 14-16 - NEPPCO Exposition and Convention, Chalfonte-Haddon Hall, Atlantic City, N.J.

Oct. 16 - 30th Annual Meeting Animal Nutrition Research Council, Marriott Twin Bridges Motor Hotel, Washington, D.C. (Arlington, Va.).

Oct. 17-25 - Pennsylvania National Horse Show, Farm Show Building, Harrisburg, Pa.

Oct. 21-22 - Fourth Annual Meeting on Poultry Condemnations, Salisbury, Md.

Oct. 29-30 - New York State Federation of Home Bureaus Annual Meeting, Sheraton Motor Inn, Thruway Exit 35, Syracuse, N.Y.

Nov. 11-13 - 31st Annual New York State Insecticide and Fungicide Conference, Alice Statler Auditorium, Cornell University, Ithaca, N.Y.

Nov. 13-14 - 51st Annual Convention New Jersey Farm Bureau, Sheraton-Deauville Hotel, Atlantic City, N.J.

Nov. 14-22 - Royal Agricultural Winter Fair, Royal Coliseum Exhibition Park, Toronto, Canada.

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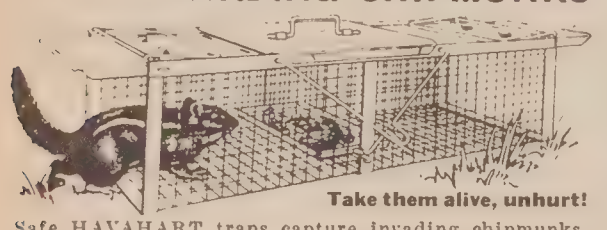

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Please send new guide and price list.

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Dollar Guide

For The Northeast Farmer

BUILDING PLANS for all kinds of farm buildings are available from Agricultural Engineering Department, Riley-Robb Hall, Cornell University, Ithaca, New York 14850. Most cost 50 cents each (some a bit more), and are available to anyone in the Northeast. Send to address above for lists of plans available.

MILK PRODUCERS under Order 2 will average eight cents per hundredweight more for their milk during the last six months of 1969 than they received during the comparable period in 1968... so forecasts Chester Smith, economist, Northeast Dairy Cooperative Federation.

CEREAL LEAF BEETLE, found in at least eight western New York counties in 1969, may develop into major problem on oats in 1970, report entomologists at Cornell. In some midwestern states, this critter has developed into a serious threat to some crops. Because of the presence of this insect, a total of 10 states ... including Maryland, New York, Ohio and Pennsylvania ... are now under a federal quarantine, which regulates the movement of such items as hay, straw, fodder, plant litter, small grains, corn, soybeans, sod, and used harvesting machinery.

WHEN UREA IS ADDED to corn silage at the recommended rate (10 lbs. per ton), the protein level of the concentrate fed can be lowered by 2 to 4 percent, depending on the amount of silage fed. Wet growing season means corn silage tends to be "sloppy" ... do not use urea if silo "runs" juice.

NEW WINTER BARLEY for livestock feed in New York is Schuyler ... available to seed growers in the fall of 1969, and to farmers generally in 1970. Malting research on newly-developed winter malting barley (as yet un-named) is in fourth year ... final plant-scale tests in breweries will be next step.

POOR WEATHER for haying has reduced the average feeding value of harvested hay. Alfalfa past the bloom stage has around 8 percent protein compared to 13 percent when cut early. For top milk production, late cut hay must be supplemented with high-protein, high energy feeds.

IBM RECORDS on the dairy herd have no value unless the owner studies them. Average and individual milk production is important, but many more facts are there to help make management decisions.

The Song of the Lazy Farmer

Mirandy don't agree with me, but I think it's high time that we should get away from home a ways; instead of spending all our days a-looking at familiar things, I want to ride trains, ships and wings to see what other lands can give and learn how other people live. For forty years or more we've been a-talking 'bout the great time when we would retire and travel 'round to see what strange things could be found. But though the years roll on apace, we've yet been hardly off the place, and now I'm sure that if we wait it won't be long 'til it's too late.

So lately I've been poring o'er timetables, folders, books galore, that tell what things there are to see and how to get there comfort'bly. I've got my eye upon a tour which would show us the world for sure; we'd take about three months or so, and clear around the globe we'd go. I will admit it ain't no joke to say we'd get back home flat broke, but I'm sure we'd have lots of fun before our wandering was done. Mirandy's plea that we can't quit don't bother me a single bit; what better way is there for me to skip a lot of work, by gee?

At last, a Low-Cost Small Scraper

overland scraper

For greater versatility and economy in agricultural, landscaping and light construction jobs. Check these features:

- **M-100, M-150 and M-200 manual models. H-100, H-150, and H-200 hydraulic models. Struck capacities of 1, 1½, and 2 cu. yds.**
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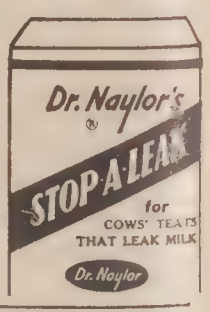

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Poultry manure is injected into ground from 1400-gallon tank, then covered.

UNDERCOVER WORK

by Jeff Manfredi

A few critics of Felix J. Paprocki's 22,000-hen egg factory in Rotterdam, New York, contend that odors from the hennery constitute a health menace and prevent them from enjoying their property. In spite of the fact that most of his neighbors support the poultryman's position, this same complaint has been the intermittent subject of discussion at Rotterdam town board meetings for nearly four years.

Mr. Paprocki started his egg business in 1953 with nine hens, and 13 years later was awarded the Ford Motor Company's annual Ford Farm Efficiency award for outstanding agricultural accomplishment. He now also owns a 50,000-bird poultry setup at Middleburg, New York.

Mr. Paprocki has recently purchased a Swedish-developed machine (costing around $4500) that injects manure 12 inches below the ground surface as it moves through a field. Four plows furrow the earth, an auger forces the liquid underground, and soil covers it. In between spreadings, the waste material is stored in underground tanks.

Additional information can be obtained by writing E. Arnold Quist at Dept. AA, Sahlstrom Mfg. Co., Bennington, Vermont 05201.

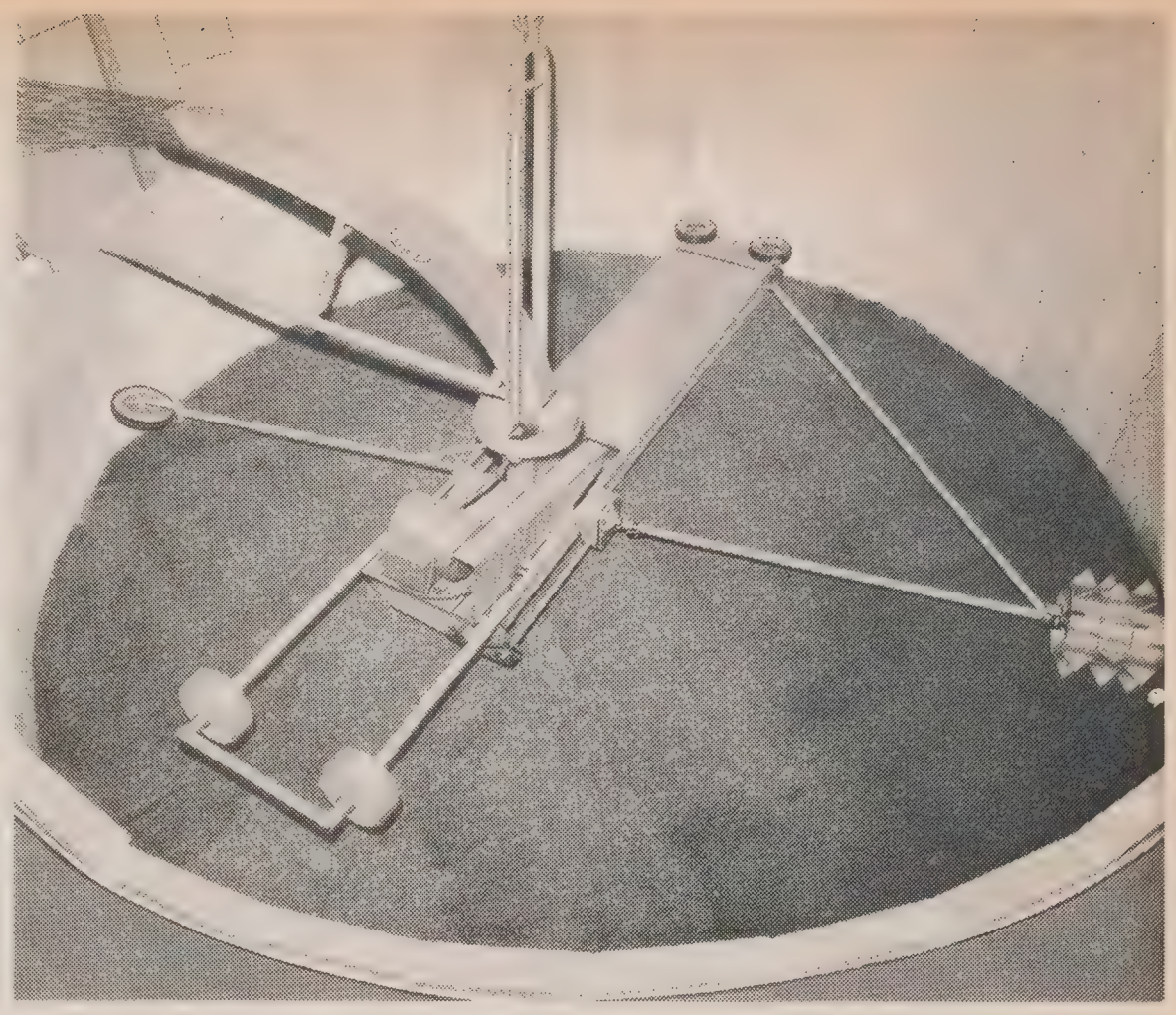
POULTRY PUBLICATIONS

For a copy of the 1969 Maine Poultry Industry Yearbook, write to Harry C. Whelden, Jr., Secretary MPIA, c/o Department of Animal and Veterinary Sciences, University of Maine, Orono, Maine 04473.

Copies of the 1969 Buyer's Guide for Pennsylvania Poultry and Eggs are available from the Division of Market Development, Department of Agriculture, Commonwealth of Pennsylvania, Harrisburg, Pennsylvania 17105.

The long-awaited report on the two-year, $300,000 study by USDA of how market eggs are priced and what can be done to effect needed improvements is available from the Economic Research Service, USDA, Washington, D.C. 20250. Ask for Marketing Research Report No. 850.

Tillage demonstrations were featured each day at the three-day 1969 Empire Farm Days. There were 133 exhibits showing $5 million worth of items . . . ranging all the way from 8-plow tractors to maple syrup cans. Estimated number of folks attending . . . 40,000!



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85 HEAD

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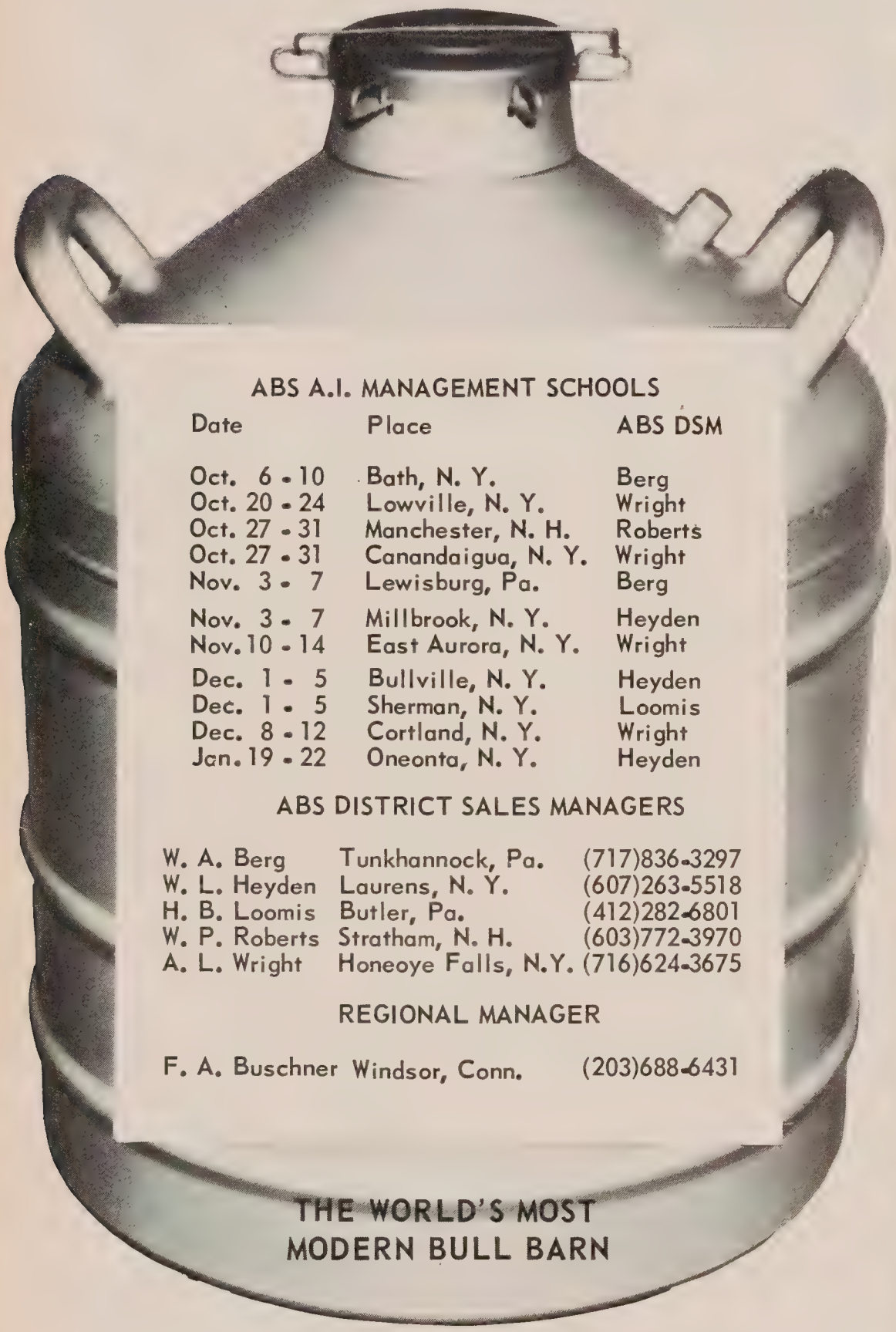

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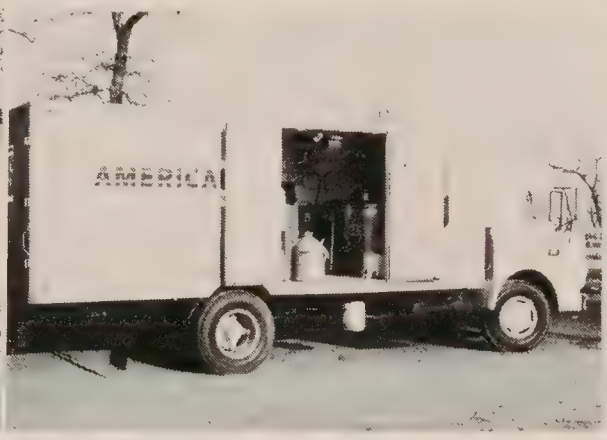

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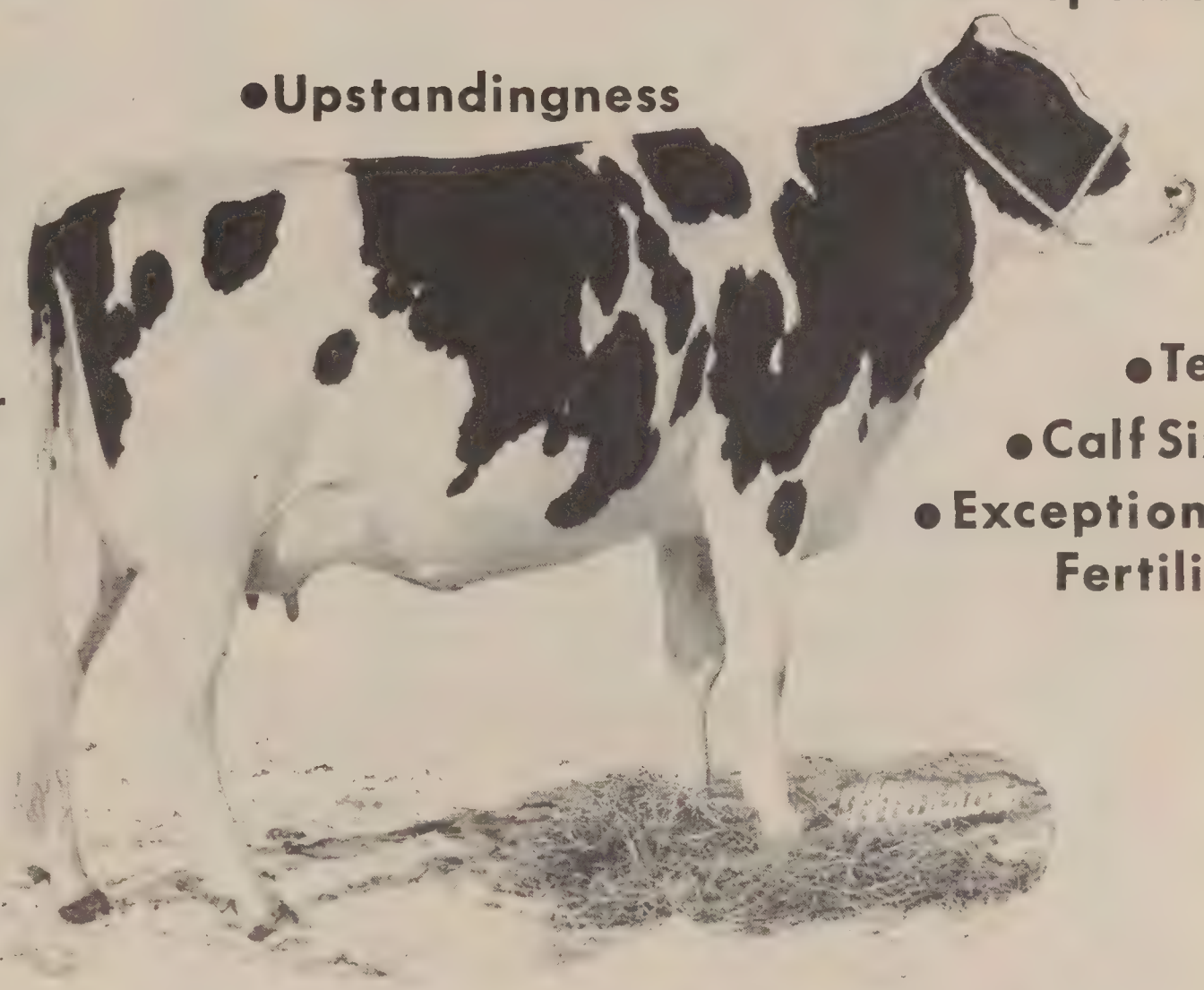

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(Continued on page 28)

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'Round the kitchen

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Last-of-the-Season Preserves

With grapes, plums, peaches, tomatoes and apples available in September, there is still time to tuck away more jars of delicious go-alongs for late fall and winter meals. We hope you will enjoy making the following recipes for good eating later.

GRAPE AND PLUM JAM

2 pounds ripe grapes (Concord type)
2 pounds ripe plums
½ cup water
8 cups sugar
½ bottle liquid fruit pectin

Slip skins from grapes. Bring pulp to a boil and simmer covered for 5 minutes. Sieve. Chop or grind skins and add to pulp. Pit (do not peel) plums. Cut in small pieces and chop. Add water, bring to boil, and simmer covered for 5 minutes. Combine fruits and measure 5½ cups into a **very large** saucepan.

Thoroughly mix sugar with fruit mixture. Place over high heat, bring to a **full rolling boil and boil hard 1 minute,** stirring constantly. Remove from heat and stir in fruit pectin. Skim off foam with a metal spoon; then stir and skim for 5 minutes to cool slightly and prevent floating fruit.

Ladle quickly into about 13 medium-size glasses and cover at once with ⅛-inch layer hot paraffin. Cool and cover. To seal without paraffin, use ½-pint jars with two-piece metal lids. Pour jam immediately into jars, leaving ⅛-inch headspace. Place lid on jar, screw band tightly; cool, label and store.

TOMATO-APPLE RELISH

2 pounds peeled, sliced peaches
1 orange sliced very thin (seeds removed)
2 tablespoons lemon juice
1 cup quartered maraschino cherries
1½ pounds sugar
¼ cup pineapple or other fruit juice
½ cup slivered, blanched almonds if desired

Combine all ingredients except almonds and cook until thick and clear (10 to 15 minutes). Add almonds if used and pour into hot sterile jars or glasses, leaving about ⅛-inch headspace. Follow previous instructions for sealing with or without paraffin.

PEACH PRESERVES

2 quarts chopped ripe tomatoes
1 cup chopped white onions
2 medium green peppers, chopped
2 medium red peppers, chopped
2 cups chopped celery
1 pint finely chopped tart apples
2¾ cups sugar
1 tablespoon salt
1½ cups vinegar
2 tablespoons white mustard seed
2 sticks whole cinnamon
½ tablespoon whole cloves

Combine all ingredients except spices. Tie spices in a cheesecloth bag and add to mixture. Cook rapidly until mixture is thick and clear, stirring constantly to prevent sticking. Remove the bag of spices and pour relish into hot, sterile canning jars and seal immediately. Makes 5 or 6 pints.

For the Cookie Jar

BUTTERSCOTCH NUT COOKIES

⅓ cup butter
2 cups light brown sugar, firmly packed
2 eggs
1 teaspoon vanilla
2½ cups all-purpose flour
1 teaspoon salt
1 teaspoon baking powder
½ teaspoon baking soda
1 cup finely chopped pecans

Cream together the butter and sugar until light and fluffy; beat in the eggs and vanilla. Stir in the dry ingredients which have been sifted together; add nuts and mix well. Shape into two rolls about 1½ or 2 inches in diameter. Wrap each roll in waxed paper or foil and refrigerate overnight or until thoroughly chilled.

Slice chilled dough ⅛ inch thick and place on cookie sheet. Bake in a moderate oven (375°) for 10 minutes. Makes about 6 dozen cookies.

Easy Version of Sticky Buns

Any mention of "Sticky Buns" is sure to bring to the mind of many people an old-time Philadelphia specialty, popular at any meal but especially for breakfast. They are baked with a brown sugar-pecan "topping" in bottom of pans. This becomes a topping only after the rolls are taken from the oven and turned upside down for cooling.

Some recipes call for the addition of a caramel or corn sirup to the topping, others for the sirup to be poured over the risen, ready-to-bake rolls or about 5 minutes before baking is completed. Currants are used in other variations. The following recipe is a modified version and comes from **Best Foods, Division Corn Products Company.**

Photo: Certo Fruit Pectin

Add a treat to any meal with delicious Grape and Plum Jam made quickly and easily with liquid fruit pectin.

STICKY BUNS

½ cup milk, scalded
2 tablespoons sugar
1 teaspoon salt
1½ tablespoons salad oil
1 package active dry yeast
½ cup warm water
1 egg
3-3¼ cups all-purpose flour (about)

Filling and Topping:

⅓ cup firmly packed brown sugar
½ cup butter
¾ cup pecan halves*
White or brown sugar
1 teaspoon cinnamon
½ cup Karo dark corn sirup

Combine scalded milk, sugar, salt and salad oil. Cool to lukewarm. Stir in yeast which has been dissolved in the warm water. Beat in the egg. Add about 1½ cups flour and beat until smooth. Add remaining flour or **just enough** to make an easily-handled dough.

Turn out onto a lightly floured cloth or board and knead until smooth and elastic. Place in a greased bowl, turning once to grease top. Cover with clean towel and let rise in a warm place, free from draft, until doubled in bulk (about 40 to 60 minutes).

While dough is rising, blend brown sugar and butter. Spread mixture evenly in a 9 or 10-inch square baking pan. Arrange pecans evenly over mixture, rounded sides down. If desired, you may sprinkle chopped pecans over mixture instead of halves.

When dough has risen, punch down and roll on lightly floured board or cloth to a 15 x 8-inch rectangle. Brush with salad oil or melted butter and sprinkle with the brown or white sugar and cinnamon.

Roll up, jelly-roll fashion, starting at the long side; seal edge tightly to roll. Cut roll into 16 slices and arrange slices in the prepared pan, leaving some space around each slice. Cover; let rise as directed before until doubled in bulk (30 to 35 minutes).

Bake in a hot oven (400°) for 20 minutes; then pour corn sirup over top of rolls and bake 5 minutes longer. Remove from oven and let stand 5 minutes. Invert on wire rack and cool slightly before serving.

*I substituted slivered almonds for the pecans when I made these buns and thought them a nice variation.

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FALL GARDENING TIPS

by Nenetzin R. White

September is usually a relaxed gardening month, but there are a few things to do that will make your year-round gardening easier.

Weeds in your borders are nearing the seeding stage, and their new crop would not delight you . . . so get rid of them. Hoeing is good for small, plentiful weeds, but the larger maturing ones should be pulled if possible. After a good rain (especially if you have a mulch) these can often be pulled by hand; if not, one dig with a spading fork will usually do the trick. If you go out with an eagle eye, I'm sure you will be amazed to find large weeds lurking in amongst your plantings.

This time of year is also very good for ridding your lawn of weeds. There are many good herbicides on the market that kill all the broad-leaved and vining weeds, with the exception of veronica. Many of these products will also feed your lawn at the same time and save two separate applications. This is also an ideal time to feed lawns; try to use an organic fertilizer that will disperse all through the fall. These cool fall nights are the ones that make good turf, for it is grass-growing weather.

Follow instructions exactly when using herbicides, for whether you apply them dry or in liquid form, they can kill many other plants as well as the weeds. Pick a time when rain is not expected for 24 hours and the hotter the day, the better results you'll get. Don't expect to see weeds disappear overnight – in fact they may temporarily become more prominent, for they twist, contort, and literally grow themselves to death, roots and all.

Since it is nature's season for re-seeding, now is the very best time to re-seed your lawns with good perennial grasses. This can usually be done at half-rate and will fill the areas where weeds died, as well as start in areas where you have annual grasses.

Don't Feed Trees Now

This is **not** the time to feed trees, shrubs, evergreens or perennials. Nice warm fall days can start new growth which will be soft and won't have time to "harden off" before freezing weather. You are likely to have severe die-back to contend with in the spring.

The perfect time to feed trees is in November, and of course drill feeding in the drip line area is the best way to do this. Do not get too close to the trunks, for you will harm large roots of mature trees and are likely to damage the thin bark of smaller trees. Tree roots, believe it or not, can make a lot of growth through the winter; also, they will have the food available very early in the spring, so they can really "take off."

September and October are ideal months to plant spring-flowering bulbs. Daffodils, tulips, crocuses and hyacinths will give you lovely spots of color. And don't forget a few groups of minor bulbs close to the paths or near your windows. Just about the time you have given up hope of spring ever arriving, they will pop up and reassure you that life is worth living after all!

What's Your Hobby?

Hobby letters from our readers

What A Collection!

I have many hobbies, but the main one is buttons. I have been collecting them since I was a child and have never bought a single button. I do not know for sure how many buttons I have, but think there must be at least 100,000 in all.

On my back porch there is an inside border design which has 10,000 buttons on it. Then I have a "button house" in the back yard because I had nowhere else to put them. There are 10 one-gallon jars of buttons out there, plus many, many more.

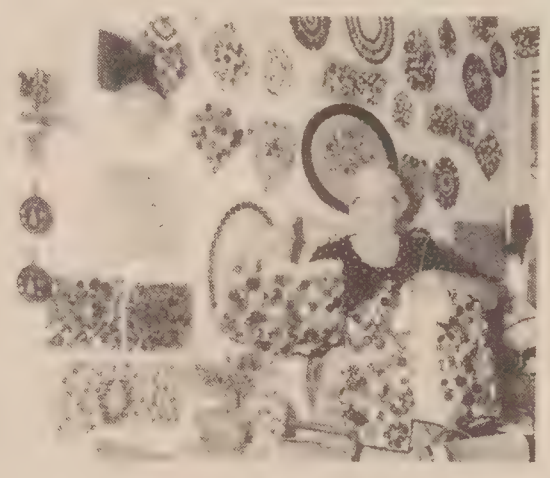

Photo: Orange County Post

Mrs. Frank Kasch holds the miniskirt made of buttons she is now making. In the background are her many designs of buttons.

I make designs out of the buttons and right now am working on a mini-skirt and jacket. I spend about 12 hours a month on my button collection, and in the summertime my house is like Grand Central Station with visitors.—**Mrs. Frank Kasch, Monroe, New York.**

Old Battery Radios

Collecting old battery radios of the 1920's and any catalogs or books pertaining to the early days of radio and wireless has been my hobby for the past few years. I have about 85 radios at present and have restored several of them.

Most of the radios were factory made, but some are homemade from kits. I hope eventually to have them all in working condition and to display them for anyone interested.—**John A. Schwerbel, R.D. 1, Catskill, N. Y.**

(Continued from page 25)

WANTED TO RENT: farm suitable for 50 cows and 25 calves. Immediate possession. Call 315-638-1072.

WANTED TO RENT in April 1970 — 30-40 cow farm in New England or Eastern New York. Ronald Lindgren, RFD 3, New Milford, Conn. 06776.

WANTED TO BUY

P.T.O. FOR MASSEY HARRIS Pony Tractor. Write Edward K. Burnett, Box 37, Ulster Park, New York 12487 or phone 914-338-8208.

WE'RE THE LARGEST BUYERS of fruit jars, bottles (beams). Send $1.00 (refundable) for huge buying lists. Schroeders, Paducah, Kentucky 42001.

WATCHES WANTED — Jewelry, spectacles, dental gold, silver. Prompt remittance. Satisfaction guaranteed. Lowe's, Holland Bldg., St. Louis, Mo. 63101.

ALL ILLUSTRATED Fox and Coyote trapping methods. Free circular. Jack Nichols, Carmel, New York 10512.

VETERINARY SUPPLIES

DAIRY AND LIVESTOCK Veterinary supplies direct to you at wholesale. Send card for new wholesale catalogue. Eastern States Serum Company, 1727 Harden Street, Columbia, South Carolina.

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NEW FORMULA "UNI-POWER-H" mastitis infusion. (H = Hydrocortisone) Now use the best for less than 23¢. Contains: Penicillin, Dihydrostreptomycin, Neomycin, Sulfamethazine, Sulfathiazole and Hydrocortisone. Included free with each bottle 10 sterile plastic infusion canula. Recommended by leading veterinarians and dairy experts. Per 100cc bottle (10 doses) $2.90 (29¢ per treatment), six bottles $2.75 each. Special: Order 10 bottles @ $2.75 and receive 2 bottles absolutely Free! Cost per treatment is then less than 23¢. This special offer available at selected dealers or exclusively from: New England Serum Company, Dept. A-9, Topsfield, Massachusetts 01983. Write for free veterinary catalog and health guide.

HEAT DETECTION: For A.I. breeding, determine heat with economical KaMar heat-mount detectors. Apply over sacrum. Turns red when cow's ready. Save time and money. Free brochure. Kamar, Dept. C-33, Steamboat Springs, Colorado 80477.

WOMENS INTEREST

RAISE RABBITS for us on $500 month plan. Free details. White's Rabbitry, Mt. Vernon, Ohio 43050.

WEAVE RUGS — make good profits — No experience necessary. Free catalog, sample card, and low prices on carpet warp, rug filler looms, parts, inexpensive beam counter. If you have loom—advise make, weaving width please. OR Rug Company, Dept. 7916, Lima, Ohio 45802.

$500-$800 MONTHLY. Raise small laboratory-breeding stock for us. We supply equipment, breeders, and instructions. Illinois Research Farms, Dept. AAC-9, McHenry, Illinois 60050.

MONEY IN DONUTS—make new greaseless donuts in kitchen. Sell stores. Free recipes. Duncan Ray, Waseca, Minnesota 56093.

MAKE EXTRA MONEY—Show friends, neighbors—gifts, stationery, toys, jewelry, greeting cards. 600 items. Experience unnecessary. Salable samples on approval. Free catalog, personalized Christmas Card Album. Hedenkamp, 361 Broadway, Dept. AA-37, New York 10013.

SEWING SUPPLIES at Discount Prices. Save to 50% on hundreds of items. Large catalog 25c. Newark Dressmaker Supply Co., Dept. 500, 140 Halsey Street, Newark, New Jersey.

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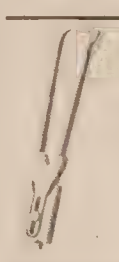

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The Pictures Tell The Story

The living room in this farm home looked pretty drab to the homemaker, so she decided to do something about it. There were no curtains at the windows, and the room was glary with light because two large windows on the opposite side flooded it with sunshine most of the day. There was no balance or beauty in the way accessories were displayed on shelves, and two unrelated pictures on the side wall were hung too high.

Look at the room now! The homemaker found a gay green and rust print to use for curtains and for pillows on sofa at other side of room. She also found some rust colored material on sale and slip covered the two leatherette chairs with it; then pushed chairs together to give the effect of a settee or love seat.

The too-small Indian rug was relegated to the boys' room, and a large, tannish free-form one (also on sale) now covers much more of the wooden floor. With items on the shelves rearranged and a new lamp added, the homemaker was mighty pleased with her decorating job!

Let's Travel Back With

JOURNEY TO DAY BEFORE YESTERDAY

by E. R. Eastman

The sales of "Journey to Day Before Yesterday" continue to be good because so many who have read it keep telling others about it. Young and old alike get a kick out of learning how their forefathers lived; and youngsters really begin to believe that Grandpa's stories "really happened."

For a copy of this nostalgic book, well-bound and illustrated, send check or money order for $7.30 (New York State tax included) to American Agriculturist, Book Department, Box 370, Ithaca, New York 14850.

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DO YOU HAVE . . .

Pieces of china (especially cups) to Pink Chintz pattern, made by Johnson Bros. of England and sold in this area in 1938? **Mrs. J. Stillings, 1 Florence Rd., Middletown, N. J. 07748,** needs these.

A "fan" quilt pattern? This request is from **Mrs. Helen Kirkendall, Baldwinsville, N. Y. 13027.**

A 1959 calendar towel? **Mrs. LaVerne Benson, Box 45, Dewittville, N. Y. 14728,** would like one for her daughter who was born that year.

Thank You!

Mrs. William Leslie of Meshoppen, Pa., wants to thank everyone who answered her request in January, for a crocheted basket pattern. She received so many letters that it was impossible to answer each one.

MUSSER SPECIALS—TREES MAKE MONEY

CANADIAN HEMLOCK
Sturdy, well rooted, 3-yr., 8"-14" plants. Ideal for background or hedge. Sun or shade.
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50 for $11.95
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15 WHITE BIRCH
15, 18"-24" trees. Bark turns white after 3 to 4 years. Hardy.
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NEW GROUND COVER
25 CROWNS—100 sq. ft. . . $ 4.00
50 CROWNS—200 sq. ft. . . $ 7.50
100 CROWNS—400 sq. ft. . . $14.00
CROWNVETCH — perennial ground cover—Flowers June til frost. Beautiful, hardy, no mowing Grows 12" 18" any climate, sun or partial shade. Chokes weeds, resists droughts.

6 RHODODENDRON & 6 AZALEA
Strong 1 yr. transplants 4" to 6" tall. Mass of roots, large leaves. Rhododendron, from red flowering stock. Azalea, hardy, mixed colors. **ALL 12 for only $7.95**

Trees are cash crops never in surplus, requiring little care. Shelter belts or windbreaks increase crop yield. Trees conserve water and soil besides beautifying and increasing the value of property.

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WHITE FLOWERING DOGWOOD			
1-yr. Seedlings	xxxxx	$16.00	$80.00
2-yr. Seedlings	15-18"	20.00	xxxxx
CANADIAN HEMLOCK			
2-yr. Seedlings	4-8"	$13.00	$65.00

FREE CATALOG
Wholesale planting list and Xmas tree growers' guide
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Ed Eastman's Page

GETTING STARTED IN FARMING

One day fifty-three years ago this fall in October, 1916, when I was a county agricultural agent in Delaware County, New York, I stopped to make a farm call on a couple whom we will call Mr. and Mrs. Abner Brown. It was late in the day. I was tired, and far from home with my Model T Ford, so when the couple invited me to stay the night with them it didn't take much twisting of my arm to make me do so.

Mr. Brown's operation was somewhat typical of the times. He had twelve or fifteen cows, a silo, and (except for some occasional help) did most of the work himself. I put on a pair of his overalls, helped him milk, and after supper we sat around the sitting-room stove, ate popcorn, and talked about the future of farming.

With their little farm the Browns had raised and helped a son and a daughter to get a high school education. Both children had married and were trying to make a living and raise a family on nearby farms. But they and most other dairymen were not making out well at all because milk prices were so low. The Dairymen's League had just won its big strike, and it looked as if milk prices to the dairymen were going to improve.

Changes

In our visit we agreed that there must be some radical changes in farming, and that life on the farm would soon be entirely different from what it was then.

How right we were! But, of course, no one could predict half the changes that would take place in the next fifty years, the chief of which is the disappearance of most of the small typical dairy farms like the one on which the Browns had made a living and raised and educated their children.

I bring the subject up now to show that the changes are going to continue fairly rapidly for at least ten more years.

Small farms have disappeared so quickly that we now have left only about three million farms in the United States, and most farms like the Brown's have gone into the limbo. The small farms that are left will continue to disappear until we lose almost a million more.

Those left will include part-time farms where a man gets part of his income off the farm, large commercial family-type farms (which will raise more and more of the food), and corporation farms. Practically all marginal farms will disappear. There will probably be some increase in corporation farms, but not as much as one might expect, because the operators do not have the all-important interest that the operators of the large family farms have.

Can A Young Man Still Farm?

With these facts in mind and the knowledge of the tremendous cost of equipment now needed, what are the prospects for a young man who loves farming to get into the business? They are still good but you must have some lucky breaks. If your father owns a farm, a part of which you may inherit, that is one break. With your help, possibly you and a brother, with father, can enlarge your farm, remodel the buildings, and stand a good chance of paying off the indebtedness and acquiring a real equity. There are all sorts of family relationships that can work in the farm business.

Another break that might be used to get you started is to form a partnership with one partner responsible for the dairy, another for the crops, and another for over-head business management, all putting in some capital.

For a young man who is well educated and has proven himself responsible, there is often an opportunity to get started on a large farm where the owner has no one interested in farming and is looking for somebody to take over and grow into the business.

In summary, therefore, it may be said that there is still opportunity for a young man to get into the farm business, but it is more difficult than it used to be. What do you think? Write me. Names will be held confidential.

The wheel of time has taken another turn and here we are in September again.

I hope the year so far has been good to you, and that the harvest brings fulfillment of your plans and hopes and everything good for you and yours.

BLACKBERRIES • • • AND RATTLESNAKES

Still the nice letters come from readers of my book, JOURNEY TO DAY BEFORE YESTERDAY.

Mrs. Herbert E. Wheeler of Lancaster, Massachusetts, writes:

"I want you to know how much I have enjoyed your book, JOURNEY TO DAY BEFORE YESTERDAY. I have read it twice and loaned it to many of my friends. I hope you will sell many copies of your book, for it is such good reading when so many books of today are not."

Mrs. Anna Fowler of R. D. 1, Clyde, New York says:

"I must tell you how much I enjoyed your book, JOURNEY TO DAY BEFORE YESTERDAY. I was born and grew up in Michigan and I have done many of the things your book reminds me of, like picking wild blackberries. We used to have to look out for rattlesnakes. I have killed many, and there are still plenty of them in Michigan. I am a widow, seventy-nine years young, live alone, mow my own lawn, drive my car and have for forty-seven years without an accident.

"I love the country and when I want to enjoy my younger days, I just get out 'Journey,' which I am now reading the fourth time. Thanks so much for writing it."

To get a copy write to American Agriculturist, Department Book, Savings Bank Building, Ithaca, New York 14850. The price is $7.30, including tax.

THE HIRED MAN AND HIS BOSS

A hired man capable of operating a five thousand dollar piece of equipment, or taking care of three-hundred-dollar cows, is a high grade worker and citizen, and must be so recognized. On the other hand, a just and pleasant employer is a jewel beyond price . . . and both parties should strive to make the relationship as nearly permanent as possible. What are some of the factors to be considered by both sides?

The hired man and his family must have a good place in which to live. If he wants one, he should have a garden spot, and perhaps some use of equipment in working it. If available, he and his family should have a stated amount of milk. There may be other privileges agreed on.

Except for emergencies, Sunday work should be confined to necessary chores, and the regular work day should be confined to reasonable hours.

In these days everybody needs and takes vacations, and an agreement should be reached between the two parties on how **both** the hired man and the employer can manage some time off. The boss needs a vacation too, so it is a matter of give-and-take cooperation.

Wages should conform to what is paid for similar jobs, and they should compare with what is paid in city shops, taking into consideration **all** the privileges a man has . . . for example, rent eats a big hole in the wages of every city worker.

Working on an assembly line day after day is deadly monotonous, and not to be compared with the interesting, constantly-changing work on a farm with modern equipment. The old-time days of the man with a hoe are past. I believe a written contract saves misunderstanding.

But, if a man does not love the country and all manner of living and growing things, the farm job is not for him. A man must be interested in his job. Some have maintained interest by profit sharing.

The big secret in any relationship is the art of communication. The ability to talk things over freely and frankly between men of goodwill will get them over many a rough spot. Another secret of successful relationship is a sense of humor by both parties, the ability to laugh off minor irritations and frustrations.

What have I omitted? What has been your successful experience either as hired man or employer? Write me. Your name will be kept entirely confidential.

A PITCHER ON THE TABLE

How often we hear of some friend who is having serious trouble with the bones of his spine or with a broken hip. The United States Department of Agriculture survey shows that there are seven million women afflicted with bone deterioration disease probably caused by not getting enough calcium in the diet.

The great horror of older people is getting hip and spine fractures from a fall. Milk is rich in calcium. It's a foundation food. Use plenty of it and you won't go far wrong nutritionally. Keep a pitcher of milk on the table for every meal.

EASTMAN'S CHESTNUT

To find just the right Chestnut for you this time I read at least fifty jokes. This one gave me the biggest laugh of all. I stole it from the Ithaca Rotary News . . .and I don't know from whom the News stole it.

A man was driving in the country when his car stalled. He got out to check the spark plugs. Suddenly an old horse trotted by.

The horse said, "Better check the gas line," then trotted on.

The motorist was so frightened that he ran to the nearest farm and told the farmer what happened.

"Was it an old horse with a flopping ear?" asked the farmer.

"Yes! Yes!" cried the man.

"Well don't pay any attention to him," said the farmer. "He doesn't know anything about cars."

SERVICE For The Northeast Farmer BUREAU

by M. A. Parsons

SERVICE BUREAU CLAIMS RECENTLY SETTLED

NEW YORK

Mr. Glenn Hobbie, Bovina Center (refund on fixture)	$ 6.00
Mr. Charles A. Ellis, Albion (refund on gas saver)	5.95
Mrs. Agnes Hallock, Barryville (refund on order)	8.82
Miss Alice Bulson, Troy (refund on book)	6.50
Mr. Mark G. Redlein, Sayville (refund on heater)	77.15
Mr. Wallace Boice, Clinton Corners (refund on deposit)	1.00
Mr. Basil G. Cruikshank, Ogdensburg (damage settlement)	110.72

PENNSYLVANIA

Miss Virginia Slocum, Westport (refund on homework)	2.00
Mr. W. S. Lehner, Kittanning (refund on injectors)	10.19
Mr. Ulysses D. Beidler, Perkasie (refund on strawberries)	13.55

VERMONT

Mr. Dean M. Brock, Wells River (refund on order)	2.20

MASSACHUSETTS

Mr. Francis L. Bates, Shelburne Falls (refund on order)	9.25

BOUQUETS

On rare occasions we are unable to help with subscribers' problems, but happily we are more often successful than not. It is always a pleasure to receive notes like the following:

"Many thanks for your efforts. The magazine arrived as requested by your Service Bureau."

* * *

"Thank you for writing the mail order company about my complaint. It brought the desired results. I received the dress today and I doubt that they ever would have sent it if you had not written them."

* * *

"I thank you for your prompt answer, suggesting some real estate agencies for dealing with in selling my property. I have signed up with one of them already."

* * *

"I want to thank you for the trouble it made for you. The servers arrived last week. If you had not helped, I never would have received them. Thanks so much."

* * *

"Thank you very much for the information and reports you sent me about the two firms that set lyrics to music.

"Your thoughtful letter and comments were helpful to my daughter's chum who decided not to have her words set to music. The chances of developing a hit tune in this way seemed very slim. Again, thank you for your most helpful service. We are most appreciative."

* * *

"As you suggested, I wrote the Attorney General, Bureau of Consumer Frauds, about not receiving the wiglet I had ordered some months ago. I have received my $5.00 refund, and I wanted you to know I followed through with your advice. Hope others will do the same."

FOLLOW-UP

In August we wrote about the lady in Hammondsport, New York, who was charged $890 for a home repair job not worth more than $50. We reported that, at the time of writing, two men had been arrested.

We have been notified since that the man and his son were directed to make restitution, were fined $25 each, and were sentenced to 25 days in jail. The men, named Davis, and supposedly from Chicago, returned $864, and were allowed to keep $36 which was the actual cost of the repair work they had done on the woman's home. She was one of the fortunate ones . . . to get her money back!

Two other women in the LeRoy, New York, area lost money in dealing with itinerant "roof repair" workmen.

Three men offered to fix the roof and chimney for one woman for $70. When they finished the work, they said she owed them $385. She claims she gave one man an envelope containing $100, but meantime the other men went through the house and took over $300 more.

In the other case, the woman paid the men $137 for tarring her roof and then found that an additional $100 was missing from her purse.

So far as we know, these men have not been caught.

ATLANTIC ASSOCIATES

Last February we reported that three employees of Atlantic Associates of Providence, Rhode Island, and Phoenix, Arizona, had been indicted by a Grand Jury on 15 counts of fraud. They were engaged in the business of "debt pooling," but were charged "for obtaining money and property by means of false and fraudulent pretenses."

The former owner, Max Gitman, was sentenced to three months in federal prison, fined $1,000, and placed on probation for twenty-one months after completion of the sentence on mail fraud conviction.

Two former managers of the Phoenix office are also being tried on mail fraud charges.

CAN YOU HELP ?

Please write Mrs. Elsworth MacDaniel, Route 1, Box 348A, Kingston, N.Y. 12401, if you have the words to the following poems — "Kentucky Bell," "Curfew Must Not Ring Tonight" and "The Blind Boy." Also a poem that goes: "The night was dark and stormy, the wind was blowing wild, a patient mother sat beside the deathbed of her child . . ."

Farmer Strangled In Power Shaft

Mrs. Marcus Pidgeon of No. Ferrisburg, Vt. received checks totalling $3300.00 from Mark Prindle of Charlotte, Vt., agent for the northwest section of Vermont.

STANDING beside a manurer spreader out in the field Mr. Pidgeon was cleaning out the bottom after emptying a load. He was wearing a new jacket which some how caught in the power shaft that runs along the side to drive the beaters. Unable to break loose from the jacket as it rolled up on the shaft he was finally choked to death.

With a family of five young children the North American checks for $3300.00 came as a helping hand to Mrs. Pidgeon.

OTHER CLAIMS PAID

A friend's name may be in this list

Charles Bedwell, Belfast, N.Y. Caught in corn picker—injured hand	$1884.34
Gussie May Osgood, Friendship, N.Y. Thrown from tractor—broke ribs	433.52
Gary Harper, Lisle, N.Y. Tire blew up—injured head	659.57
William Campbell, Little Valley, N.Y. Slipped off tractor—inj. back	696.14
Paul B. Lindell, Great Valley, N.Y. Fell between hay bales—injured knee	934.57
Mari Mosher, Aurora, N.Y. Fell—broke hip	1575.01
Eugene Pritchard, Sterling, N.Y. Fell from onion crates—inj. knee	481.80
Glenn Spencer, Forestville, N.Y. Pinned by log—broke leg	1406.43
Dale Croscutt, Mayville, N.Y. Auto accident—multiple inj.	1716.30
Louis Sturm, South Dayton, N.Y. Caught in lawn mower—inj. fingers	132.65
John Nelson, Van Etten, N.Y. Electric shock—inj. neck, back	914.68
Hope White, McDonough, N.Y. Kicked by cow—broke leg	330.91
Bert Trombley, Ellenburg Center, N.Y. Slipped off tractor—broke ribs	124.28
Diane Schumacher, Marathon, N.Y. Hit by cow—inj. neck	177.84
Stanley Dibble, Hamden, N.Y. Bridge gave way—broke ribs	498.91
Lawrence Lawson, Dec'd, Tivoli, N.Y. Drowned in river—loss of life	675.00
Anthony J. Muscato, Sr., North Collins, N.Y. Thrown from trailer—inj. back	545.00
John J. Musick, Jr., Chaffee, N.Y. Caught on hay bine—inj. hand	136.78
Victor J. Nichols, Burke, N.Y. Caught in door—inj. finger	142.78
Olin Galloway, E. Pembroke, N.Y. Bus accident—cut scalp, broke ribs	775.71
Schuyler Dievendorf, Dec'd, Ilion, N.Y. Auto accident—loss of life	1500.00
Louis E. Hammond, Carthage, N.Y. Kicked by horse—injured leg	280.65
Lynn Howard Virkler, Croghan, N.Y. Caught in P.T.O.—mult. cuts & bruises	289.18
Ernest Rook, Lowville, N.Y. Truck acc.—injured arm	458.59
Louis Hirschy, Lowville, N.Y. Slipped on wet grass—broke ribs	689.15
Miles Benedict, Turin, N.Y. Slipped on hay wagon—injured knee	227.43
Dean Swenson, Earlville, N.Y. Butted by steer—inj. back	177.14
Emerson C. Moyer, Canajoharie, N.Y. Hit by branch—inj. eye	387.22
Regina Geiskopf, Boonville, N.Y. Hit by hay bale—inj. knee	115.70
H. Duane Skeele, Fabius, N.Y. Fell off platform—inj. hip	134.10
Scott Brocklebank, Canandaigua, N.Y. Slipped in barn—inj. knee	150.00
Sarah Zalunski, Goshen, N.Y. Kicked by cow—broke arm	$ 117.14
Susan Curcio, Dec'd, Richfield Springs, N.Y. Auto accident—loss of life	2800.00
Lola Mae LaBarge, Dec'd, Canton, N.Y. Pedestrian acc.—loss of life	1250.00
Robert S. Chapin, Rensselaer Falls, N.Y. Auto acc.—broke collarbone	284.33
William Slayton, Hornell, N.Y. Fell caught on truck rack—inj. finger	857.27
Andrew Nadjada, Bath, N.Y. Hit by payloader—injured leg	276.89
Richard Putnam, Avoca, N.Y. Thrown from tractor—inj. shoulder	160.70
Frank J. Luta, Bradford, N.Y. Gored by cow—inj. hand	122.14
Clarinda Bowen, Newark Valley, N.Y. Cut on meat slicer—inj. finger	104.29
Martin Kuhlman, Nichols, N.Y. Thrown from tractor—broke arm	113.00
Charles Oaks, Ithaca, N.Y. Caught in power planer—inj. finger	124.28
L. Clark Wright, Fort Ann, N.Y. Spreader tipped over—broke leg	1228.56
Clarence R. Bushart, Marion, N.Y. Using saw—cut thumb	809.14
William Baker, Palmyra, N.Y. Struck by cable—inj. eye	701.20
James Alan Lehr, Macedon, N.Y. Caught in power mower—inj. hand	135.60
John DeNeef, Dec'd, Lyons, N.Y. Drowned—loss of life	2250.00
Herbert Warner, Sr., Himrod, N.Y. Ladder fell—broke leg	135.71
Ralph F. Kerrick, Towanda, Pa. Knocked down by heifer—inj. leg	214.28
Robert E. Jenkins, Troy, Pa. Fell against beam—inj. back	363.25
A. Luther Watt, Meadville, Pa. Caught in picker—inj. hand	800.00
John V. Mulvey, Genesee, Pa. Tire rim blew off—broke ankle	967.69
Naomi S. Tingley, New Milford, Pa. Fell—broke arm	100.00
Robert Elmer Davis, Honesdale, Pa. Cranking tractor—broke wrist	156.43
William Conrad, Jr., Andover, N.J. Hit by truck—injured hand	300.00
Joseph Racite, Pennsgrove, N.J. Fell pole vaulting—broke arm	405.25
Harold R. Britton, Sr., Plainsboro, N.J. Motorcycle acc.—broke foot	418.25
Alice Starkey, Northfield, Mass. Hit by car—injured leg	244.13
John Burnell, West Poland, Maine Hit by ball—broke leg	249.00
Clarence E. Murray, Concord, N.H. Fell in tub—inj. leg	334.69
Laurence D. Reed, Windsor, Vt. Paint brushes caught fire—leg burns	204.50

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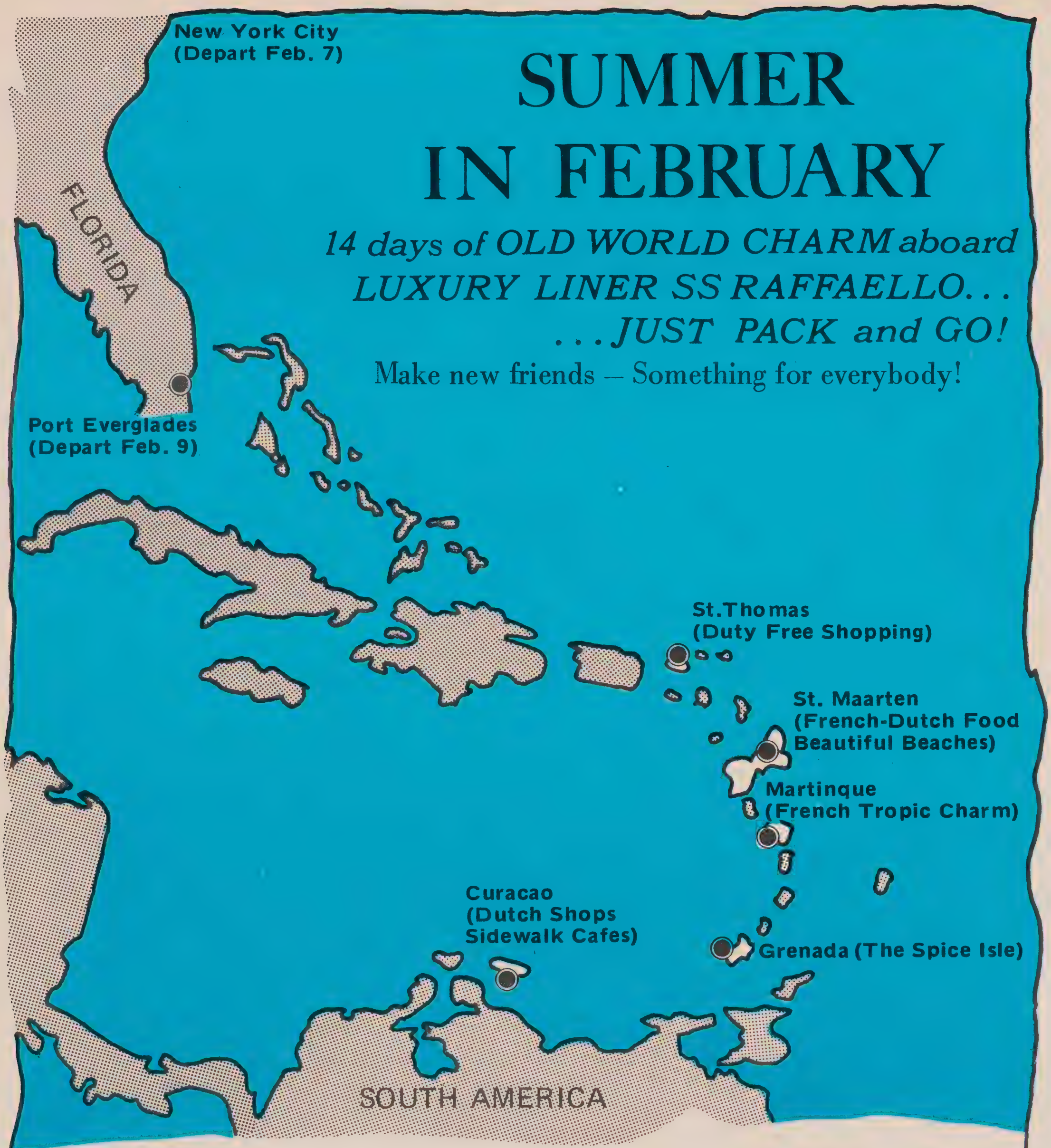

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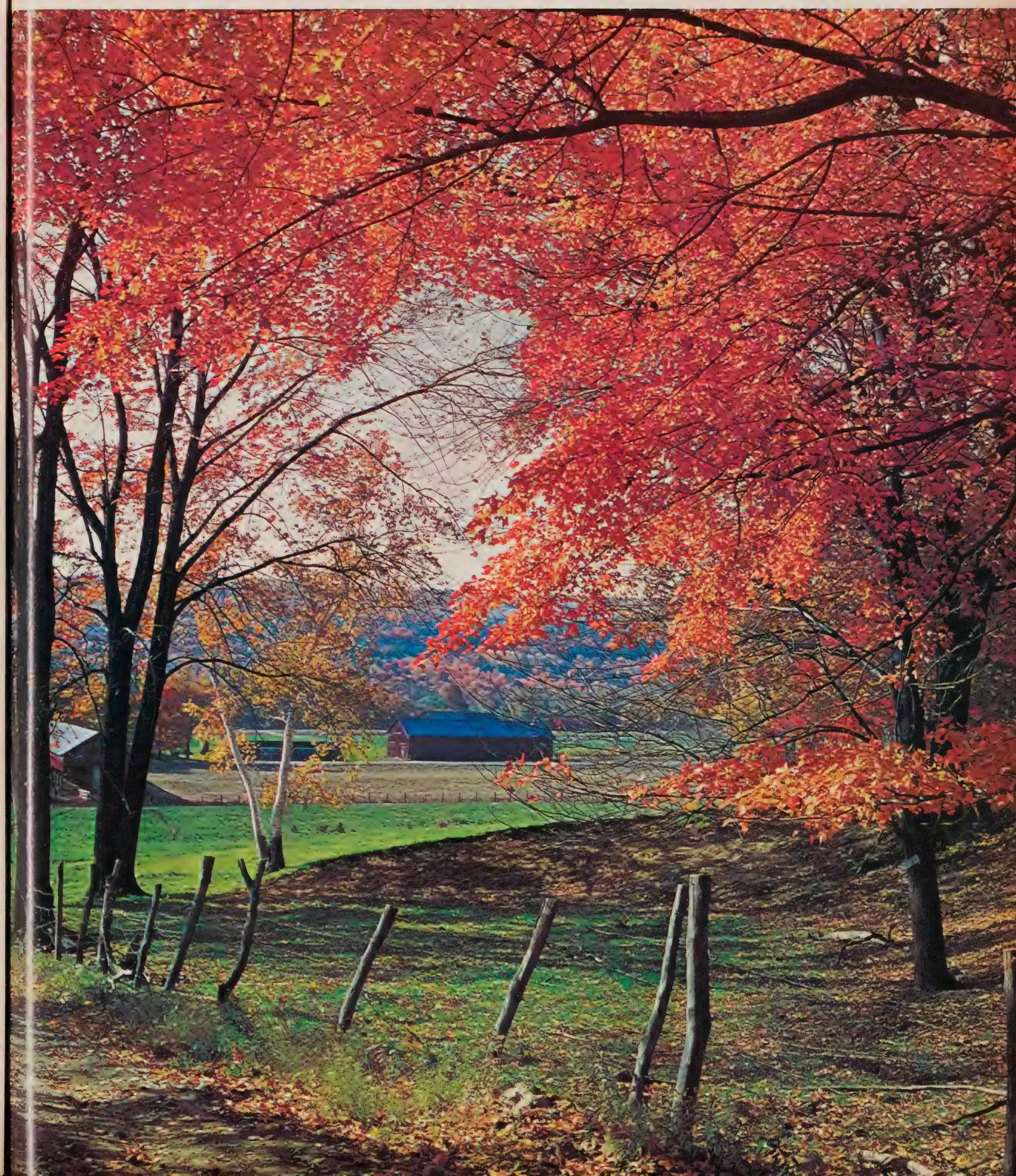
For The Northeast Farmer

OCTOBER 1969

American Agriculturist
and the
RURAL NEW YORKER



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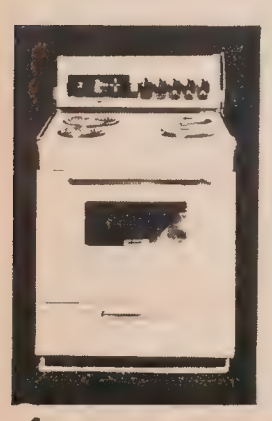

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For The Northeast Farmer

American Agriculturist and the RURAL NEW YORKER

Vol. 166, No. 10

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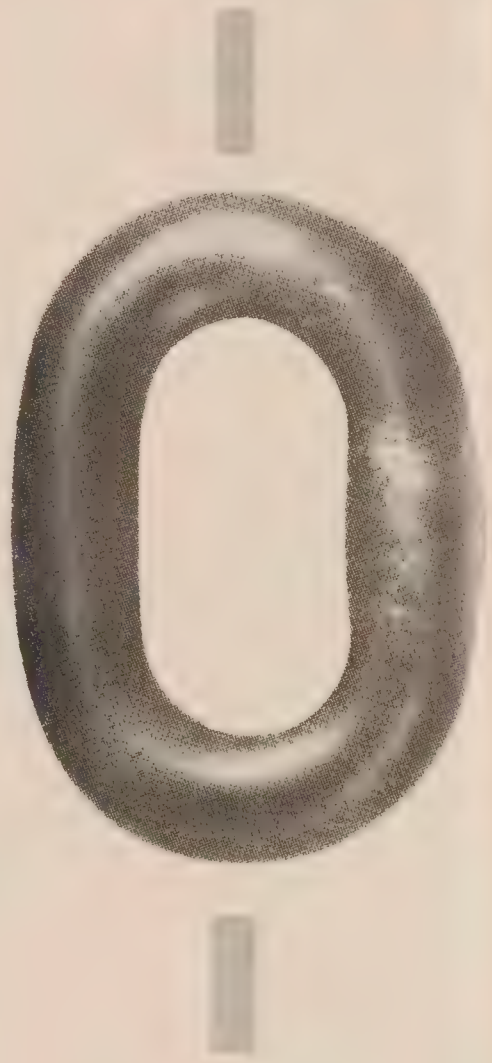
OUR COVER

We treasure the flaming beauty of the fall because it so quickly gives way to the bleakness of winter.

Photo: Herbert Shumway, Greenfield, Massachusetts.

IN THE CORNELL BARN CLEANER THE LINK IS THE THING



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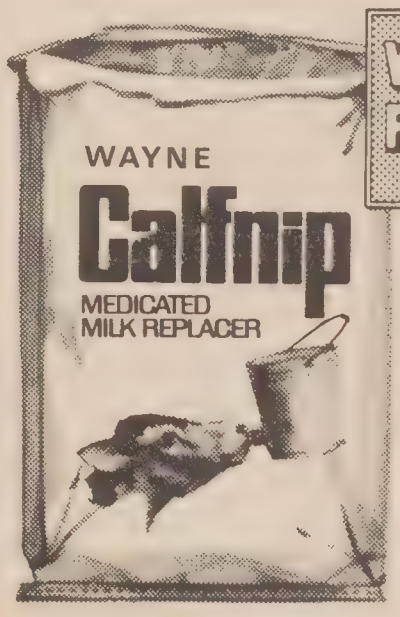

WAYNE FEEDS

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EDITORIALS

by GORDON CONKLIN

TO MY SON AND DAUGHTER

I hope you noticed some of the words written about astronaut Neil Armstrong, whose place is secure forever in the history books. These are the ones I mean:

"He grew up in middle-America during the depression, steered by a set of stern and stubborn values: work hard, smile, save your money, count your blessings, and pray a lot. Also: Learning is the salvation of the human race, and sloth by far its greatest peril."

You'll find a lot of folks who think those "stern and stubborn values" are a lot of baloney . . . supplanted now by "situation ethics" and by the idea that "everything is relative." Lulled by the most widespread affluence known anywhere on earth, some people in these United States conclude that such values are irrelevant to the new age.

Note, though, that the man who stepped over the threshold of the doorway leading to new worlds does not share such beliefs.

Could it be that the true heroes of the ages . . . those whose deeds create a response in every generation . . . share similar attitudes toward self-discipline and the importance of work?

CONDITIONED REFLEX

A Russian physiologist named Pavlov became famous for developing the concept of the conditioned reflex . . . getting a dog to react to the ringing of a bell.

Sometimes I wonder about the conditioning we're creating in people. For instance, some farmers are rewarded by government specifically for being nonproductive on at least part of their acres. If they produce on those acres, they are subject to punishment.

Some minority groups are being rewarded as a result of violence, or the threat of violence. Students find "confrontation" can be rewarding as compared to following accepted channels.

Older people are rewarded by Social Security payments specifically on the basis that they be unproductive . . . or at least productive only in minimal amounts. It has always seemed to me that no benefits should be taken away from older people who are able to hold down a full-time job.

Nonproductivity and violence . . . not very constructive kinds of activity toward which to condition people seeking reward!

MIDDLE GROUND

As a result of a recent editorial on the use of pesticides, I've received a number of letters . . . ranging all the way from unbridled rage to thoughtful appraisals of the situation.

Several folks argued that we'll end up in a middle ground as far as pesticides are concerned . . . and I agree with them. Actually, we're pretty much in the middle course already . . . somewhere between all-out use to maximize efficiency at one extreme, and complete banning of pesticides at the other.

Amidst the controversy, I think there are several very important things to remember:

1. The technological margin between a land of plenty and one of want is narrower than most people know. We **must** use some pesticides if we are to feed our people adequately.

2. Restrictions on the use of pesticides should be national, not state-by-state. If all U.S. farmers have to operate by the same change in rules, their competitive position is not affected. It's unfair to force New York farmers (for instance) to grow sweet corn without DDT . . . unless New Jersey growers have the same restriction.

To some extent, thought needs to be given to similar competitive situations between nations. Mexico, as an example, may not ban a pesticide that we eliminate . . . and thereby our friends south of the border might gain a substantial competitive edge over U.S. growers.

3. Farmers can gain some valuable brownie-points with many non-farmers by giving in gracefully . . . where an objective analysis provides solid evidence of long-run pollution danger. Much of the anti-pesticide hue and cry stems from massive misinformation and emotionalism, but there **are** pesticides that can damage the environment in ways that nobody . . . including the farmers . . . wants to see happen.

Continuing . . . and probably more stringent . . . regulation of pesticides lies in the future. Even so, the total tonnage of their use in the U.S. is almost certain to grow.

"IT AIN'T NECESSARILY SO"

Not so many years ago it was considered terribly irresponsible to grow corn on a field for a number of years in a row. Agronomists warned solemnly of the terrible things this would do in terms of lowering organic matter, depleting soil fertility, and increasing erosion.

Then along came effective herbicides, increased mehcanization, and a swing toward more corn for roughage and grain. Result: many especially-responsive fields have grown corn without a break for many years . . . and with the blessings of most agronomists.

At one time clearcutting was considered by most foresters to be a nasty word. It conjures up visions of ruthless exploitation, of laying waste the forests with axe and saw. As a forestry management practice for hardwood stands, it was bitterly condemned by some as a practice incubated in ignorance and hatched in greed.

But in a recent USDA publication entitled "Forests For The Future," clearcutting is recommended . . . with supporting information that makes a lot of sense. And, heresy of heresies, the publication concludes that clearcutting provides **more** water in nearby streams, not less!

It even reports that, "Clearcutting is a friend of wildlife, for birds and animals need variety, too! Biologists agree that scattered openings in a forest, such as are characteristic of even-aged management, greatly increase the capacity of the forest to support wildlife."

Finally, I recently became aware that educational policies have come full circle in some schools. At one time, years ago, children learned in a one-room schoolhouse where all abilities were lumped together in a grade. Then educators began to advocate "intellectual homogeneity" by tracking students . . . the upper track of bright students, the middle group, and so on.

Now, at least one school I know of is seeking to structure classes so that each includes students from all ability groups. Recent research indicates that achievement is affected more by the background and aspirations of other students than by the quality of the school's facilities . . . or even of its teachers.

A cynic, I suppose, might observe that if you wait long enough everything becomes fashionable again. Shucks, fellows, that means the skirts are bound to be lowered again some day!

In any case, I'd say that one needs to avoid becoming "locked" on any particular technology. Keep a healthy skepticism about what is **the** best way to do something. Experiment now and then . . . on a small scale . . . to see whether something you know for sure is necessarily so!

GNATS AND CAMELS

The programs to clean up air pollution are legion, and a great deal of publicity attends them. Yet, I've actually seen some of the most vociferous anti-pollution people start on their second pack of cigarettes for the day!

Another irony amidst the passing parade involves the folks who claim that milk plugs the body's pipes and brings an early heart attack. After attending meetings where the diet-heart theory was expounded, I've watched some milk-haters belly up to the watering-trough for several clouts of Old Panther.

But, in terms of living dangerously, the national Secretary of Transportation reports that nearly half of all drivers involved in fatal highway crashes have high concentrations of alcohol in their blood. The report concludes that "the use of alcohol by drivers and pedestrians leads to some 25,000 deaths and a total of at least 800,000 crashes in the United States each year."

The Travelers Insurance Company has appropriately entitled its report on 1968 traffic accidents "Alcoholocaust." It reports that anointing a steering wheel with alcohol makes a terribly dangerous combination . . . and there are endless figures to prove the point.

It has always puzzled me that burning leaves can help stir up vast government programs . . . but not cigarette smoke. The accusations against milk create headlines, but alcohol quietly continues its fatal work on a gigantic scale . . . and unattended by much publicity.

It seems that we mortals want the **other guy** to mend **his** ways to protect the environment and make our society a more constructive one. In the process of looking for such programs, we strain at the gnats . . . and swallow the camels without even noticing them.

Maybe that's why a friend of mine rather cynically has labeled the human race "The Unthinkables." Suppose he's right?

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or

☐ $100 weekly hospital benefit for up to one full year

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1 Print Name in Full Mr. Mrs. Miss .....

2 Home Address .....

..... Zip Code .....

3 Date of Birth ..... (Month Day Year) Sex ..... Height ..... Weight .....

4 Nature of Business .....

Position and Duties .....

5 Have you ever applied for or been issued insurance in this Association? .....

6 Have you ever been confined to or treated in a hospital, sanatorium or institution?

..... (Yes or No) If "yes," give details: .....

.....

.....

7 During the last five years have you had any medical or surgical advice or treatment or to the best of your knowledge and belief have you had any departures from good health? ..... (Yes or No) State full details of all such instances including any treatment which has been recommended but not yet performed. (If "None" so state)

.....

.....

I agree that upon acceptance of this application this Association shall not be liable for payment of any benefits based on injury occurring or sickness arising prior to 12 o'clock noon, standard time at the place of my residence, of the day of such acceptance.

Dated ....., 19..... at .....

Name in Full .....

Signature of Applicant

Membership No. .....

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AHC-1W Assmt. A 0 S 0 H Q Cov. - No. AA1

The Oros Brothers. . . (l. to r.) Louis, Julius, Joe and John.

BIG DAIRY FARM

Three hundred cows are a lot of cows on any farm. But when you remember that four brothers . . . Julius, John, Joe and Louis Oros . . . run it, the farm at Cincinnatus, New York, doesn't look quite so big.

It's important, I think, to know that this business wasn't organized quickly . . . it grew.

In 1933, the boys' father bought the original farm of 400 acres. The farm acreage has also grown, now measuring 1400 acres. For some time, the four boys worked with their father, then in 1955 formed a partnership.

"We thought it over for four years before we built the present free-stall setup, which we began using in January of 1969," said Julius. "Before that, we had cows in four barns, 120 in one, 50 in another, 95 in a third, and a few in a fourth. Two of the barns had pipeline milkers, the others were equipped with standard milking machines. The setup took too much labor.

"When we moved into the free-stall barn, we had around 300 milkers. Our total cows and heifers number 540, and we expect to have 380 milking by fall with the same labor force we used in the four barns. To run the place we have four men in addition to us four brothers. One man has been with us 10 years."

Expandable

As John explained, a barn for 50 cows was built next to the site of the new barn four years ago. At that time, it was built so it could be expanded. It has tie stalls and is now used for cows about to freshen and for dry cows. Heifers are stabled in one of the old barns.

"Feeding is all mechanized," said John. "The herd is divided into two groups and each group is milked in a double-eight milking parlor with three men doing the job. It takes two hours to milk the herd in the two parlors.

"The cows eat grain while being milked, although we can feed grain in bunks in the stable area. The milk from each group goes to a separate bulk tank. At one time we sold 6 tons of milk a day, but now we are down to about 5½ tons.

"We bale some hay . . . mostly alfalfa . . . for heifers, but the milking herd gets a mixture of haylage and corn silage delivered automatically to bunks. Each group of cows is fed from two silos, one holding haylage, one corn silage."

Silage

All the corn goes in the silo. No small grain is grown, and a 16 percent grain ration is purchased.

"So far," said Joe, "We have felt that the cows can eat enough grain while being milked. It seems to us that cows need less concentrate when they get high quality roughage, including silage with plenty of ears."

I asked about management problems. "When something comes up," replied Louis, "we sit down and talk it over. We figure that four heads are better than one. Unless we all agree on what to do, we just wait and study until we do agree."

The boys haven't split up responsibilities as is sometimes done, but all are familiar with all aspects of the business. They report that milk production increased when the cows were moved into the new barn. For one thing, they said, "We can keep a much closer watch on individual cows when they are all together in one herd."

Here is a big dairy farm, well organized and managed, but one which grew bigger gradually.

"We would never advise a man to get this big all at once," remarked Julius. — *H.L.C.*

MANAGING FREE STALLS

In 1955, Al Sweetland of Fabius, New York, bought his present farm of 186 acres, mostly tillable. Before that, he and his father and three brothers ran a farm near Cazenovia.

There were two old barns on the place. Some remodeling was done and 38 milkers were kept in tie stalls. Then, in 1965, a free-stall barn was built with 94 stalls, and 45 purebred Holsteins were purchased to expand the herd.

"I had three ideas in mind," said Al. "First, I wanted to accomplish more with less hard work; second, I wanted a business big enough to hire labor so we could get away occasionally; third, I wanted to develop a more profitable business."

Incidentally, one hobby of the entire family is skiing. There is a ski center nearby and often the family takes advantage of it in season.

"What will you do if you break a leg skiing?" I asked. "I haven't figured that out yet," was the reply.

"With 100 cows," said Al, "everything is different. The timid cow can't do well in free stalls. Then feeding is different. You can't give a cow much individual attention. But the biggest difference I see is in record-keeping. You may recognize each cow as an individual, but unless you record breeding dates and other information promptly, you are out of luck.

"Also, I feel that it's more difficult to develop a topnotch herd of purebreds. It can be done, but I haven't done it yet. It takes a good man to do it. A large herd makes it possible to divide the herd into two groups according to production and I plan to do that in the fall. I find that 9 to 12 pounds of grain are about all a cow can eat while being milked. By dividing the herd, I can give the high producers extra grain, while avoiding feeding the low producers too much."

Al Sweetland

The farm has 2 silos (both 24x60), one used for corn, one for haylage.

"Last winter was the first that we had haylage to last all winter," Al added.

The land is good for alfalfa and plans are to make it the only hay crop, seeding when necessary without a so-called "nurse" crop. Seventy acres are in corn, with plans to pick 20 and put the balance in the silo.

"I tried planting corn in double rows," Al commented, "but I concluded the ears lacked size, so I stopped. On the best corn ground, I aim for 28,000 plants per acre . . . and down to 20,000 on some poorer fields."

Concerning machinery, Al commented, "I am inclined to feel that too much importance is given to obsolescence. We have a tractor that has been overhauled a couple of times and still gives good service. Then, too, a young farm boy can operate a medium-sized piece of equipment where he can't handle some of the big stuff some experts advise us to buy."

Al gives liberally of his time to local affairs. He's interested in the Farm Bureau and has served on the school board.

A visit with him emphasizes the importance of good management on today's farms. — *HLC*

NEAT AND PROSPEROUS

Two brothers, Stephen and David Fleming, plus a little part-time help, are the labor force on a 739-acre dairy farm near Marathon, New York. They grew up on the farm, worked with their father for some time, and bought the entire farm in 1959.

The dairy barn with stanchions was built in 1960, and is 234 feet long. "We wouldn't keep cows any other way," Stephen commented.

Milking

The cows are milked in stanchions and the milk is carried to a bulk tank by a transfer system. Contrary to the fairly common practice of feeding roughage in bunks, this herd grazes on good pasture. Then when it gets short, the cows are turned on second-growth meadows which have been cut early. "We also have a field of millet which is pasture," added Stephen.

"This is a fall dairy," said David. "Sixty percent of the herd freshens from September to November and we seldom have over 120 in production at one time. We also have around 85 head of young stock."

"We feed heavy on hay," added Stephen, "about 75 percent hay and 25 percent silage. Tillable acres make up about 445 and about 400 are in hay and 35 to 40 in corn. We feed hay 3 times a day, corn silage once, and grain twice."

When I arrived at the farm, the two boys were greasing up a tractor and Haybine. Nearby was a steel building which aroused my curiosity.

"It's a steel structure 50×100 feet," said one of the boys, "where we store our equipment. None is left outside summer or winter."

I must add that I seldom see a farm that is kept so neat. No machinery outside, no junk piles, no burdocks. The two boys are obviously doing real well, yet they find time to keep the farmstead attractive. I often wish more good farmers would follow their example! — *H.L.C.*

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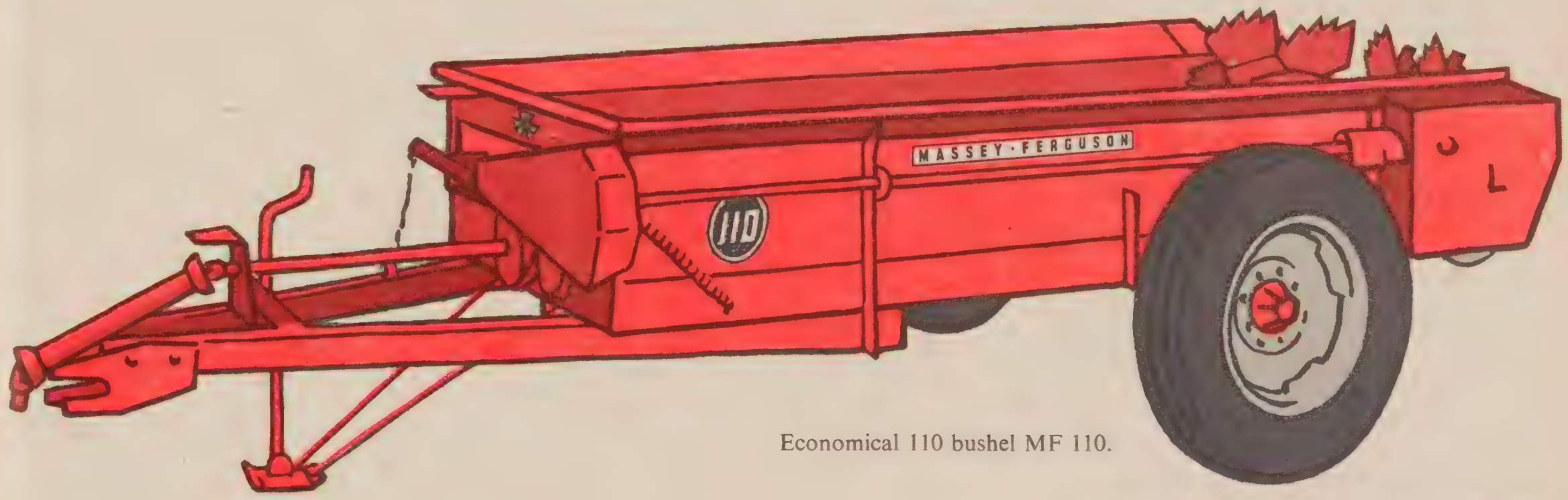

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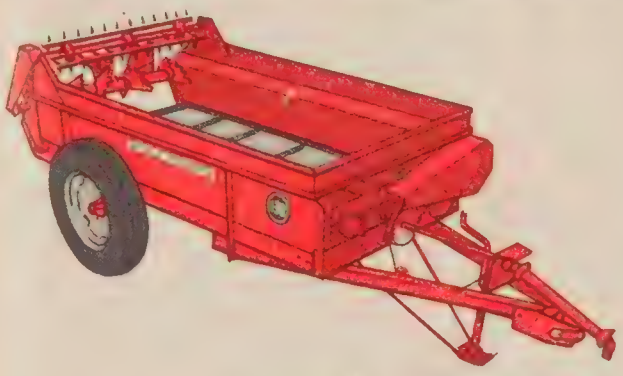

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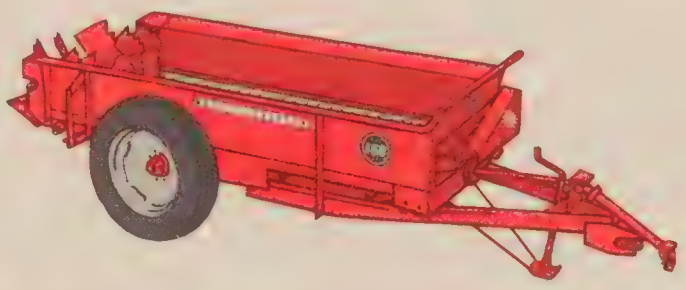

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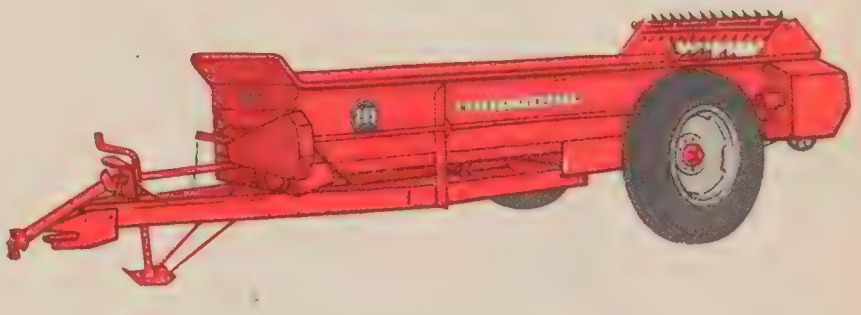

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Conditioning pens for calves at Supreme Cattle Company. Fences are made with 4 × 4 oak posts driven 3½ feet into the ground.

HOLSTEIN STEAK

THE Supreme Cattle Company operates a beef cattle farm near Perry City . . . between Ithaca and Watkins Glen, New York, on State Route 227. The most obviously unusual thing about the place is that all the beef cattle are black and white!

With a capacity of 400 Holstein calves per batch, and 7 groups processed per year, present yearly output is 2800 head . . .but plans call for increasing, with the goal of 10,000 head annually being mentioned by management. The ramrod of the outfit is Bill Simpson, who began ten years ago feeding out dairy cattle brought down from Wisconsin to Missouri.

Crossbreeds

Out there he started with crossbreeds (beef bull crossed on a dairy cow), but found there just weren't enough of them. He switched to dairy animals for beef purposes, and found they did as well as crossbreeds.

He likes Holsteins for the purpose, finds they have top-level rate of gain, an impressive conversion ratio, and the lean-type meat that the market demands. Calves are widely available in the Northeast as a by-product of the dairy industry . . . and it's a good thing they are, for each batch of 400 is assembled within a week's time from New York and Pennsylvania livestock auctions!

Nursery

Calves are started in a nursery, where they're fed powdered milk automatically mixed in warm water . . . from Nursette "mechanical mothers," each fitted with a rubber nipple (15 calves per nipple). For 5½ weeks they're on a full-milk diet, then have one-half a week on a transition ration of less milk, and weaned at 6 weeks of age.

The body temperature of each calf is taken every day for the first two weeks after being received at the nursery . . . one of the arrows in the animal health bow at Supreme. They get a shot of multiple vitamins as soon as they arrive at the nursery, and also an injection of antibiotics. Bill figures mortality rates during the first year of operation at a fraction over 5 percent . . . and uses 5 percent mortality and 5 percent culling as thumb rules. However, he finds the culling rate has been below that figure.

Full Feed

After weaning, calves go on a full-feed program of high-moisture corn-and-cob meal (plus commercial supplement for stilbesterol, protein, vitamins, etc.). It takes around 6500 tons of corn a year here . . . some grown on the farm, some purchased from neighboring farmers. No roughage . . . except for the corn cobs . . . is fed.

All animals are ear-tagged for identification, and weighed periodically. Feed conversion being shot for is 6.5 or 7 to 1 on animals from 250-1000 pounds liveweight . . . on a ration of 80-85 percent TDN. Calves move at specific intervals from the inside nursery to outside conditioning pens (7 weeks), and then eventually from there to fattening areas.

What about the meat from dairy animals? Bill reports shooting for a 58 percent dressing percentage . . . and a **consistency** of carcass that is sought in most products by the American consumer. He believes Holstein beef excels in tenderness and leanness, and is equal to conventional beef breeds in taste. Several consumer-preference tests in major cities have convinced even the doubters that consumers like the product.

There's a new riddle going the rounds. "What's black and white and red meat all over?" The answer is Holstein beef!

BAN THE BOYCOTTS

MORE than 20,000 concerned Americans from across the nation have formed the Consumers' Rights Committee. One of their major efforts is to stop product boycotts.

Cards to indicate concern are being sent by the thousands all over the United States. They will be used to show broad support for current efforts to get national legislation establishing employer-employee ground rules to settle disputes. Agriculture is not now covered, and this is causing much of the present problem surrounding farm workers.

If the California-grape boycott is allowed to continue, what will be the next target? New York and Vermont apples? Maine and Pennsylvania potatoes? New Jersey and Empire State vegetables? Brand name product of all kinds?

Pawn

If boycotts are allowed, the consumer becomes the innocent pawn in every labor-management dispute over the production of food and manufactured products.

Anti-consumer boycotting is a national problem. The problems surrounding union organization of farm workers cannot be isolated in California, nor in the production of one particular crop. Since the problems are national in scope, they should be approached in terms of national legislation.

Producers of perishable crops are particularly vulnerable to work stoppages. Unlike industrial and retail concerns . . . or even universities and city governments, which can sustain extended periods of strikes and lockouts without total economic disaster . . . a farmer who is subjected to a successful strike at harvest time loses his entire year's production.

Not Enough

No-strike clauses in a union contract are not enough. Growers have watched as university professors, under contract, go out on strike. Growers looked on as the leader of the New York City transit workers went to jail in violation of a no-strike clause in his contract, as the strike went on. Of what value would it be if the National Farm Workers Organizing Committee leadership went to jail for a no-strike violation if the crop rotted in the field? Growers want national legislation spelling out the ground rules and setting forth the damages if they are violated by either side.

Boycotts Wrong

The Consumers' Rights Committee feels that boycotts are wrong, whether by right-wing groups interfering with the sale of Polish hams . . . or by protectionist groups interfering with the sale of products legally imported from foreign countries . . . or by new-left groups and union organizers interfering with the sale of domestic farm products.

Boycotts are wrong because they hurt innocent people and endanger the livelihood of workers far removed from the conflict.

Boycotts are wrong because they impede the free flow of food and products to the American public. Boycotts are wrong because they violate the basic rights of consumers to choose what they, as individuals, wish to buy or not buy.

Boycotts are doubly wrong if they are enforced . . . as in the case of California table grapes . . . by intimidation of customers, by harassment of store employees, by firebombings and other forms of violence.

To end the grape boycott, and the threat of similar disruptions in the future, national legislation is needed to:

- Guarantee the unimpeded flow of food to the American public.
- Apply national standards that do not discriminate against farmers and farm workers in any particular area of the country.
- Provide for secret balloting in union recognition elections.
- Recognize the special vulnerability of farmers to strikes at harvest time and critical growing periods.
- Outlaw boycotts that threaten consumers' basic rights, including their personal safety.

If you agree, send the statement of concern printed here to: Consumer's Rights Committee, 910 17th Street N.W., Room 901, Washington, D.C. 20006. No financial commitment is involved, but your help is needed to influence legislative decisions!

PLEASE PRINT NAME HERE

I agree that product boycotts, particularly of food, are harmful to the American economy; that they violate the consumer's basic right to decide for himself what he wishes to buy or not buy; and that violence and intimidation directed at consumers are totally indefensible, regardless of the merits of the controversies involved.

Specifically, with respect to the boycott of California table grapes, I believe that the question of collective bargaining procedures for farm workers is a national problem that should be dealt with in Congress—not at the grocery store—and that legislative approaches to the problem should:

(a) recognize the vulnerability of farmers to strikes at critical growing periods; and

(b) protect the rights of consumers to make individual choices in the market place, without fear for their personal safety.

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ADDRESS (Street, City, State, Zip)

OCCUPATION, ORGANIZATION and TITLE, if any

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This photo shows ZERO's patented, entirely-built-in SPATTER-SPRAY Self-Cleaning and Sanitizing System in action. The big 4,000-gallon ZERO above has three impellers that hurl a triple cross-fire of detergent solution against the tank's entire stainless steel interior for thorough cleaning and sanitizing.

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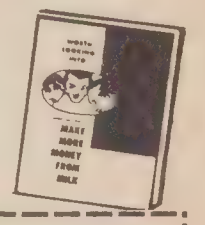

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SIZE OF MILK HOUSE ..... SIZE HERD .....

MAKE OF PRESENT MILKING MACHINE ..... AGE....

ADDRESS ..... PHONE .....

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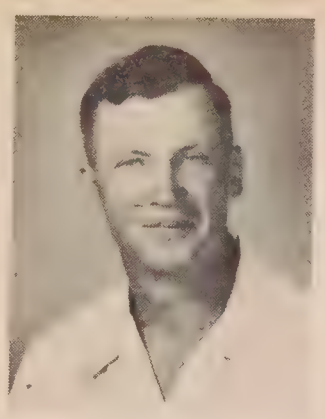

Gayway Farm Notes

by HAROLD HAWLEY

VACATION TRIP

One of the pleasures of any trip for us is to see what other folks are doing. Anytime we get very far from home we like to "expert" on why some particular crop or crop-livestock combination, etc., was used.

It's easy to see why certain areas should be dairy, or corn-hogs, or cash grain, or fruit, etc. Invariably, though, about the time I finish telling all and sundry how come the farming pattern is whatever it is, presto . . . around the next corner will be a type of farm not at all like those we've just passed!

It's a real game to figure out what influenced this farmer to be different. Was his soil different? Did he have a special market? Just what was it? Anyway, we enjoyed several thousand miles of farming of many types.

It's natural to remember the unusual, so many of my comments aren't a real reflection of the most typical things seen. For instance, we were surprised that a few threshing machines are still used in Michigan and Wisconsin. A straw stack in the barnyard is a rare thing nowadays.

In the real grain country of Minnesota, North Dakota and across Saskatchewan, almost all the grain was windrowed, allowed to cure and dry, and then threshed out with a combine with a pick-up attachment. We were again surprised at the number of tractor-drawn windrowers and combines. Of course, the custom rigs and many of the farmer-owned outfits were self-propelled, but in total I suspect a fourth of the equipment was of the pull-type.

Windbreaks

For years we have been trying to eliminate fence rows . . . not only to make fields larger, but also to save the loss of production that a hedge involves. Several farmers in North Dakota and Montana, and also in the Canadian provinces, have planted trees along field boundaries for wind breaks.

I guess that fallow ground can get to moving pretty badly if it dries out and the wind gets to blowing as it can out there. It's possible to spot a farmer working up his wheat ground a long way off, just by the cloud of dust he raises. The grain in this northern section is all spring grain, but the summer-fallowed ground was being worked when we passed through.

Field cultivators (up to 40 feet wide) and big spring tooth harrows seemed to be the favorite tools. Presumably because of the dust, most of the big tractors used for plowing and fitting had cabs. Likewise, dual wheels were most common. Even with a 30 or 40-foot-wide rig being snatched right along with those 6, 7 and 8-plow tractors, it was going to take a few days to fit up some of the fields. They were mostly 80 or 160 acres, but we drove by some up to 3 miles long and apparently pretty wide.

Grain harvest was also in full swing, with windrowers and combines in every direction. Flax was not ready, but oats and spring barley were being done and wheat was about ready. Everyone was rejoicing at big yields, but crying about prices.

In Canada, a man told us they were limited to selling 5 bushels of grain per cropped acre on their farms. This was their quota system. Of couse most of them kept right on growing more than this . . . selling to a cattle feeder or going into the cattle business themselves. Just as in this country, the government program was bringing about some shifts in types of farming. Those cash grain men . . . who might have

(Continued on next page)

ask the man who drives one.

He's spreading manure the easy way, without the mess and nuisance of dirty repair jobs caused by aprons, beaters, gears and ratchets. His spreader has only two moving parts. He's spreading all manures in any weather, from liquids to frozen solids, and laying it all out in a 20-foot swath. It loads, pulls and handles easy. Built like a tank, it spreads more loads with less headaches than any other spreader. Just ask the man who drives one...look for the big red spreader. Or, tell your dealer you want to test drive one yourself. Then you'll be one of our best salesmen...a satisfied customer.

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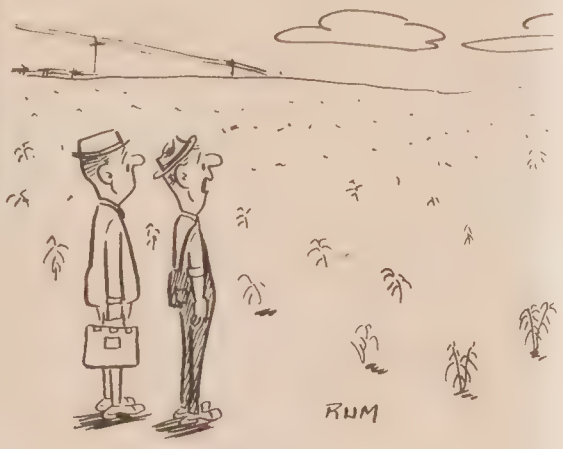


"I saved money last spring by using my old planter one more time."

American Agriculturist, October, 1969

two to ten sections of grain and nothing else . . . really had no interest in livestock at all, except as a way of marketing their grain.

Ground Storage

We had heard people talk about grain stored on the ground, but hadn't seen it until we got into Canada . . . and then only rarely. But we did see a pile of barley on the ground . . . 100 or so feet long, 20 feet wide and perhaps 8 feet high. Presumably this would be moved as soon as trucks were available.

Truck size puzzled us. Over-the-road grain trailers were 40-50 feet long and really carried loads, but most farm trucks being used to haul grain from the combine wouldn't hold over 250 bushels. We kept thinking that larger trucks would pay for men who combine grain for several weeks at a time, and who haul it from fields several miles from home, then for really long distances to the elevators.

I'm sure there's a reason for using the smaller trucks, but I didn't find it. Of course, the grain truck there takes the place the pick-up has on most eastern farms so maybe they don't want a big truck for all the rest of the year.

Sunflowers grown in great fields like corn . . . to be harvested with combines equipped with a corn head . . . were something else new to us. The sunflower seed is crushed to get the oil. One grower commented that his only dislike about the crop was the problem of turning under the stalks!

Malting Barley

Inasmuch as we hear of the possibility of malting barley as a new crop for New York, I was much interested in the comments of farmers who are growing it in Minnesota. It's a good crop, good yields and good price . . . if the brewers need it, and if you can meet the grade requirements.

Their problem was too much malting barley with a resultant price some above feeding price, but with such strict grading that only a part of the crop ended up as malting barley. In other words, it could be a good deal, but they had spoiled the fun for themselves by growing too much of it. The rush was on there to grow barley because of the limitation on wheat acreage.

High-moisture oats and barley, put in the silo much as we put in high-moisture corn, is gaining in popularity among livestock men. It enables them to start harvesting a little earlier . . . which is important to people with such large acreages to harvest. Also, some mentioned that storage costs in a large silo were not more than in several steel bins.

High-moisture small grains, including wheat, is something that interests us if we could pull it off. These men mostly seemed enthusiastic about it.

It's almost beyond reckoning how many wild ducks nest and live on the thousands of ponds and lakes across these Plains States. This was a wet year for them so I suppose many of the ponds stayed wet this year whereas they might normally have been dry. At any rate, every little pothole . . . as well as the hundreds of beautiful lakes . . . all had ducks on them. Never did we even guess that there were so many waterfowl in the whole country!

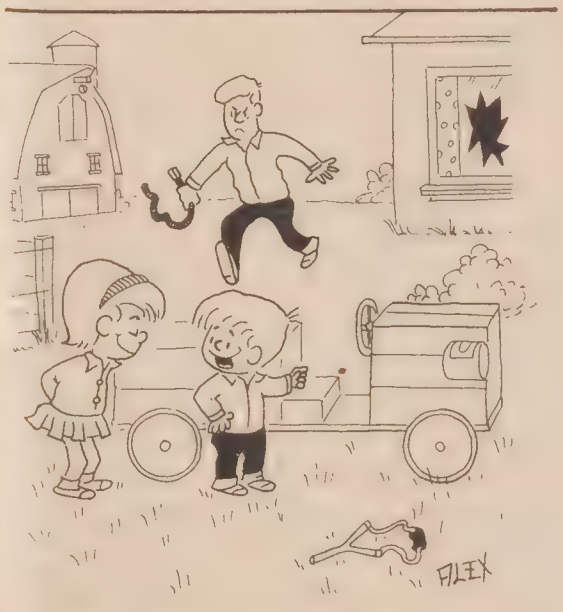
WINTER WHEAT

We planted our winter wheat the first week in August this year. A combination of forces caused us to do this against our better judgment.

First off, we are buying some land which is in the corn program. We couldn't crop it this year, but could plant wheat for next year. Because we were going to plant wheat on it, we decided to plow it in July. Then when it got to raining so we couldn't combine grain or make second cutting hay, we decided to get the seed planted so as to have the work out of the way.

We have long since quit worrying about the Hessian fly, so our only concern was whether we might get too much growth this fall, with consequent smothering and winter killing. It may be necessary to clip it this fall if it gets too tall.

While we don't recommend such early planting, it was nice to have that job done so it wouldn't interfere with silo filling.



'DAD'S HOME? AND HE HAS A BELT FOR MY SEAT.?'

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FORESTRY

Leveling Floors — Forest Service flooring experts, together with researchers from private industry, have developed a simple, speedy and economical way to rehabilitate sagging old floors.

With the patented Marcraft system, a leveling device holds 2 × 2-inch wooden strips in a level position over the old floors. Fast-hardening plastic foam is then sprayed under and around the wooden strips to bond them to the old floors and make a rigid framework that acts as a level foundation for supporting the new floor.

Full details are available from: Information Services, Northeastern Forest Experiment Station, 6816 Market Street, Upper Darby, Pennsylvania 19082. Ask for NE-66, entitled "The Marcraft Floor-Leveling System for Urban Rehabilitation."

Clearcutting — A new color brochure published by the USDA Forest Service explains reasons in favor of the adoption of a system of clearcutting as a scientific method of maintaining a sustained yield in the hardwood forests of the East. Clearcutting has for years been a dirty word in the lexicon of most conservationists, but this booklet explains why the practice is now acceptable to professional foresters. Copies are available by writing Hal Marx, 6818 Market Street, Upper Darby, Pennsylvania 19082.

Private Campgrounds — Now available are two unique publications for private campground operators and those planning commercial campsites. Copies of "A Guide for Private Campground Development in New Hampshire" (Extension folder 56) and "Evaluating Forest Campground Sites" (Extension folder 64) are available from the University of New Hampshire Mail Service, Durham, New Hampshire 03824. Single copies are free to Granite State residents; out-of-staters will have to pay a nominal fee.

Still Available — Lew Bissell, Extension Forester at the University of Maine, reminds Christmas tree growers that the Manual prepared by Les Bell and Don White of Michigan State University is still available. It is considered one of the best publications for Christmas tree growers available anywhere. Orders may be sent to Allied Chemical Corporation, 40 Rector Street, New York, N.Y. 10006. The price is $2.00.

Christmas Trees — Without shaping, only 10 percent of the pines and 30 percent of the spruces and firs in an average plantation would be marketable. The booklet, "Shaping Christmas Trees for Quality," shows through sketches and pictures the difference between natural trees and those sheared and pruned wisely. Free single copies are available to Vermont residents who write to: Publications, Morrill Hall, University of Vermont, Burlington, Vermont 05401.

Also available is a Connecticut Agricultural Experiment Station booklet "Chemical Control of Weeds in Christmas Tree Planting." Connecticut residents can write to the University of Connecticut, College of Agriculture, Storrs, Connecticut 06268 for a free copy. In both cases, nonresidents will be charged a nominal fee.

Woods Soils — Woodland owners in New York are learning about a system that will enable them to determine the potential of their woodlands for wood crops, based on soil productivity for tree growth. Foresters and soil scientists have long recognized varying rates of tree growth on different soil types. The system evolving from a study they are conducting will eventually enable a woodland owner to determine the productivity and plan the management of wood crops from a woodland suitability map.

The system is based on the height of a tree at 50 years. White and red pine on the best soils are 90-100 feet tall at 50 years of age. These soils are in Class 1 for red and white pine. On poorer soils these species grow only 50-60 feet high in 50 years. Red and white pine on these soils are in Class 5.

Sugar maple, the most beautiful and valuable of the hardwoods in New York growing on soils in Class 1 are about 75 feet tall at 50 years. This species is about 50 feet tall on soil in Class 5 after 50 years. Classes 2, 3 and 4 would produce trees of varying heights between those in Classes 1 and 5.

Pick your winner from these improved Agway milk replacers

Milksaver: doubled in fat content and more than doubled in protective antibiotic.

Early Wean: now with a doubled fat content and a broader spectrum antibiotic.

Sted-A-Milk: now with 20,000 units of vitamin A and 5,000 of vitamin D.

Now, with these improved milk replacers, you can pick the one that best meets your management program. For fast growth and top resistance to disease, choose **Early Wean** and feed twice daily (once daily, if you prefer), and wean at four weeks. For herd replacements where there's no need to rush the calves, you'll like **Sted-A-Milk's** economy. If you're looking for bloom and rapid growth, high-value **Milksaver** is for you. . . . The chart tells the basic story. Your Agway store or representative can tell you more.

AGWAY MILK REPLACERS	% Protein	% Fat	% Fiber	Vitamin A (USP units/lb.)	Vitamin D (USP units/lb.)	Antibiotics (amount/ton)
Early Wean	24.0	20	.25	20,000	5,000	250 grams neomycin base
Milksaver	24.0	10	.75	20,000	5,000	100 grams Terramycin*
Sted-A-Milk	28.0	10	3.00	20,000	5,000	100 grams Aureomycin†

*Reg. Trademark, Charles Pfizer Company Inc. †Reg. Trademark, American Cyanamid Co.

Agway

YEAST BREAD CONTEST WINNERS

Later this month when State Grange Session is held in Albany, New York, the following Pomona winners of the 1969 Yeast Bread Contest, co-sponsored by American Agriculturist and New York State Grange, will compete for top honors. A wonderful assortment of household equipment and grocery prizes, as well as cash awards, will be presented the high winners.

Watch for the story of the state finals with pictures of all winners present at State Grange when their names were announced in the New York edition of our December issue. The recipe that comes in first will also be printed.

Here are the Pomona winners who will bake bread for the state contest in Albany:

COUNTY WINNERS

COUNTY	GRANGE	WINNER
Albany	Bethlehem	Mrs. Dorothy Hill
Allegany	Belfast	Miss Patricia Michael
Broome	Upper Lisle	Mrs. Alice Leet
Cattaraugus	Mansfield	Mrs. Denton Burroughs
Cayuga	Auburn	Mrs. Pauline Cuykendall
Chautauqua	Kennedy	Mrs. Bertha Town
Chemung	Chemung Valley	Miss Helen Hartman
Chenango	Norwich Township	Mrs. Betty Barnes
Clinton	Schuyler Falls	Mrs. Roy Vaughn
Columbia	Mellenville	Mrs. Ruel Teaney, Jr.
Cortland	Freetown	Mrs. Gerald Stone
Delaware	Utsayantha	Mrs. Floyd Champlin
Dutchess	Washington	Mrs. Henry Kading
Erie	Collins Center	Mrs. Edward Butzer
Essex	Wadhams	Mrs. Emily Pierce
Franklin	Westville	Mrs. Bernard Fleury
Fulton	Crum Creek	Mrs. Ethel Reese
Genesee	East Pembroke	Mrs. Harry Kelsey
Greene	Jewett	Mrs. Ethel Martin
Herkimer	Cathetackne	Mrs. Helen Youker
Jefferson	Carthage	Mrs. Frank Getman
Lewis	Lowville	Mrs. Charles Rogers
Livingston	Ossian	Mrs. Mildred Moulton
Madison	Lenox	Mrs. LeOra Reynolds
Monroe	Irondequoit	Mrs. Jacob Sattel
Montgomery	Florida	Mrs. Elsie Jager
Niagara	Lockport	Mrs. John Maschino
Oneida	Rome	Mrs. John Parsons
Onondaga	Borodino	Mrs. Richard Wise
Ontario	Enterprise	Mrs. Kenneth Gaylord
Orange-Rcklnd	Hamptonburgh	Mrs. Naomi Specht
Orleans	Waterport	Mrs. Marjorie Waugh
Oswego	Lower Oswego Falls	Mrs. Betty Goodfellow
Otsego	Otego Valley	Mrs. Ford Harrison
Putnam-Wstchr	Cortlandt	Mrs. Lucy Lent
Rensselaer	West Sand Lake	Mrs. Clara Hermance
Saratoga	Greenfield	Mrs. Frieda Rogner
Schenectady	Gifford	Mrs. Newton Harmon
Schoharie	Sharon	Mrs. Fred Smith
Schuyler	Tyrone	Mrs. Marcie Jayne
Seneca	Seneca	Mrs. Harry Lawrence
Steuben	North Urbana	Mrs. Theodore Wood
St. Lawrence	Heuvelton	Mrs. Lionel Pierce
Suffolk-Nassau	No contest held	
Sullivan	Monticello	Mrs. Edna Yaple
Tioga	Flemingville	Mrs. Mabel Hyatt
Tompkins	West Danby	Mrs. Frances Snyder
Ulster	Asbury	Mrs. Vernon June
Warren	Luzerne	Mrs. Freda Naatz
Washington	North Granville	Mrs. Walter Oddy
Wayne	Newark	Mrs. Roy Hoad
Wyoming	Buffalo Valley	Mrs. Eleanora Winch
Yates	Guyanoga Valley	Mrs. Robert Kenville

"CAL" PERRIN

Fred Perrin, a senior majoring in animal husbandry at the Agricultural and Technical College at Cobleskill, is the state president of the Collegiate Agricultural Leaders for the 1969-70 college year. Fred is a resident of Ogdensburg, New York. As president, he will head the organization's activities in the six Agricultural and Technical Colleges in New York State.

The Collegiate Agricultural Leaders Association, known as "CAL" in New York State, was formed in 1968.

The students strive to create interest and knowledge about agricultural occupations and assist other students in developing character and training for useful citizenship and patriotism. One of their objectives is to relate agriculture and their education to providing services to the college and community.

RURAL ZONING

by Amos Kirby
New Jersey Editor

THERE'S a need in New Jersey . . . and other states . . . to seriously consider whether farmland should be zoned strictly for farming, and residential building restricted from these areas.

There are sites on hundreds of state, county and municipal roads where someone wishes to build a home. The owner can often get a price for an acre of land that is many times its value for growing crops. And so another home-seeker buys a lot and builds a home in the country.

Then from nearby barn, feed lot, or poultry house, come odors that are strange and offensive to the new homeowners, and they appeal to the municipality for relief. Under health regulations, the farmer may be required to discontinue his operation if the odor cannot be eliminated.

This has happened in many areas in New Jersey, and such instances are increasing. Even though the farm may have been there 100 years, the newcomers may win.

Few farms in New Jersey are remote enough to be safe from instrusion by newcomers, who like the country but aren't acquainted with the odors that may arise from time to time. Even the application of pesticides by airplane or power sprayers creates problems which the city and town folks consider offensive.

No one can say, "It won't happen to me." Agricultural zoning may not be an issue in **your** community in 1969 or the next decade, but it **can** be an issue in some places even tomorrow.

GENERATION GAP

Floyd Hicks, Penn State Extension poultry specialist, advises poultrymen aiming at better egg production to maintain separate quarters for the old hens and the pullets. He points out that a decline of as much as 10 percent in egg production can be expected when the two groups are housed together . . . as compared to what would have been the case if the same birds were housed separately.

Hicks bases his conclusions on the results when poultrymen, in cleaning out the flock, retain older birds that appear to be still in production and move in pullets to fill the house.

AFTER-MILKING LOTION

A special lotion applied to the teats of cows following milking is being recommended in New Jersey as an effective tool in the state's continuing campaign to reduce and control mastitis.

Immediately after milking, the teats should be completely immersed or dipped in a non-irritating, concentrated iodine or chlorine solution made and sold for this purpose. For details, consult your county agricultural agent.

STUDENT HELP

For 15 years, Gloucester County fruit grower Wilmer Zee has been obtaining labor for his peach packing house by hiring high school and college students to pack the fruit from more than 300 acres.

The packing plant is operated with about 15 young men and women under the supervision of Mrs. Zee, who takes a personal interest in helping boys and girls.

Workers are paid prevailing wages. While the days may vary in the number of working hours, the system has apparently been satisfactory. Some students have returned for five years . . . or until they finish college.

A 15-minute break for relaxation in mid-afternoon means good production later in the day when there might otherwise be a "slow-down fatigue."

The Zees have a separate group of young men in the orchards picking fruit. Under careful supervision, they produce on a par . . . or even better . . . than the other packers. Here is an instance where boys sent to do a man's job are proving that it can be done!

SEASONAL LABOR

New Jersey fruit and vegetable growers are taking a second look at commuter-laborers from nearby cities . . . such as Philadelphia, Atlantic City, Trenton and even north Jersey cities . . . and what they see is good. These city dwellers are solving the harvesting problems on many farms.

In 1968, nearly 7,000 men and women from Philadelphia commuted as far as 40 miles to harvest blueberries, peaches, tomatoes and other crops. This year more than 6,600 have been working on various farms. The shrinkage in numbers was largely due to the loss of tomatoes and blueberries caused by heavy rains.

Wages range from $1.50 an hour for hourly workers, to 20 cents per basket for piecework. Some earn up to $150 per week. Some come to farms in their own cars; others by buses operated by crew managers.

The number of southern migrant crews continues to decline, and there has been a substantial drop in the number from Puerto Rico, despite strenuous efforts to recruit additional workers. If this labor supply continues to shrink, fruit and vegetable growers will probably turn more and more to commuters to harvest perishable crops.

SURPLUS CORN

With one of the biggest corn crops in years, many Garden State dairymen are thinking about a trench or bunker silo to preserve this valuable crop.

Corn silage is considered one of the cheapest roughages on a dairy farm, but few farms are equipped with upright silos to hold all the extra tons that are being produced this year. With a limited tonnage, snow fence silos may be the answer, but where tonnage is substantial, horizontal storage appears to be the most satisfactory method of saving that extra forage.

Extension agents have plans for building such storage. Construction is relatively inexpensive . . . perhaps only a few hundred dollars . . . and involves a minimum of labor. In many instances, they are replacing the far more costly upright silo. Besides, if one digs a trench this fall and doesn't like it, the ground can be leveled off and planted next spring!

NEW TOMATO

Another fine tomato from the New Jersey Agricultural College is Ramapo, developed by Dr. B. L. Pollock, who has spent years in the tomato-breeding field. It looks good, tastes good, and has a place in the market . . . especially the roadside market trade . . . and in the home garden.

A mid-season variety of the beefsteak type, Ramapo has good size and color, grows well on the ground, and can also be staked. Commercial planting trials in New Jersey and Delaware place it in an enviable position as a tomato for the future. Seed supply is limited and has been available through the Vegetable Growers Associaion of New Jersey, Room 212, Blake Hall, College of Agriculture, New Brunswick, New Jersey 08903.

PLASTIC CAGES

Two of the hottest possibilities for the Eastern Shore broiler industry are windowless houses and plastic cages, now under study at the Delaware Agricultural Experiment Station.

Windowless house tests show that a four-pound cockerel can be grown there in less than eight weeks, and the meat produced on less than two pounds of feed per pound of live weight.

The plastic cage, still in the experimental stage, looks like one of the major changes in the production of meat at lower costs, plus better quality birds.

The big advantage of plastic cages is that . . . with a slight modification in the feed and water equipment . . . they can be lifted from the building, loaded on trucks and hauled to the dressing plant. This will eliminate the time-consuming and costly system of crating the birds on the farm and birds will not be bruised as they were when getting them in and out of the crates. The plastic floor in the cage has also resulted in a substantial reduction of breast blisters.

COMEBACK

New methods of controlling the alfalfa weevil now make it more profitable to plant this crop. It may be too late to sow seed this fall, but it's an ideal time to apply lime. It requires up to six months for the lime to do its work in modifying soil acidity and next spring the soil will be in ideal condition for fast growth.

STAR FARMER

The outstanding Future Farmer in an 11-state area of the Northeast this year is 20-year-old Oscar J. Manbeck of Bethel, Pennsylvania, son of Mr. and Mrs. George R. Manbeck. As "Star Farmer of the North Atlantic Region," he'll receive his title . . . and the $500 that goes with it . . . at the 1969 National Future Farmers of America Convention in Kansas City October 14-17.

The young dairyman is one of four farm youths slated for top regional awards at the convention. At that time, one will be named Star Farmer of America and receive an additional $500.

YOU BUY IN SEPTEMBER, OR OCTOBER,

WE PAY UP TO $600 CASH.

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The amount of cash is shown below. Ask your dealer today for details.

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Big capacity combines for grain, corn, and beans. Straight-through balance design for extra stability and traction. Models and sizes are—2890, 3496, 4296, 4293 or 4292.

WE PAY
Cash of $500. $600 on rice machines.

YOU BUY
The Jet Star 3. 45 hp 206 cu. in. engine. Economical, utility size. But built to last. Ideal for special chores and many jobs on the farm.

WE PAY
Cash of $300.

YOU BUY
The U302. 55 hp 220 cu. in engine. A workhorse. Great on economy and reliability. Low on repairs and maintenance.

WE PAY
Cash of $300.

YOU BUY
The M670. 73 hp 336 cu. in. overhead valve engine. Big displacement teamed with lower engine rpm gives greater torque than comparable tractors.

WE PAY
Cash of $400.

YOU BUY
The G900. 97 hp 451 cu. in. engine. Built for longer life. A heavy-weight. Up to 1700 pounds more weight than any other tractor in its class.

WE PAY
Cash of $500. $600 on 4-wheel drive models.

YOU BUY
The G1000. 110 hp 504 cu. in. engine. Biggest engine in its class. Turns over at only 1800 rpm for less wear. A powerhouse.

WE PAY
Cash of $500. $600 on 4-wheel drive models.

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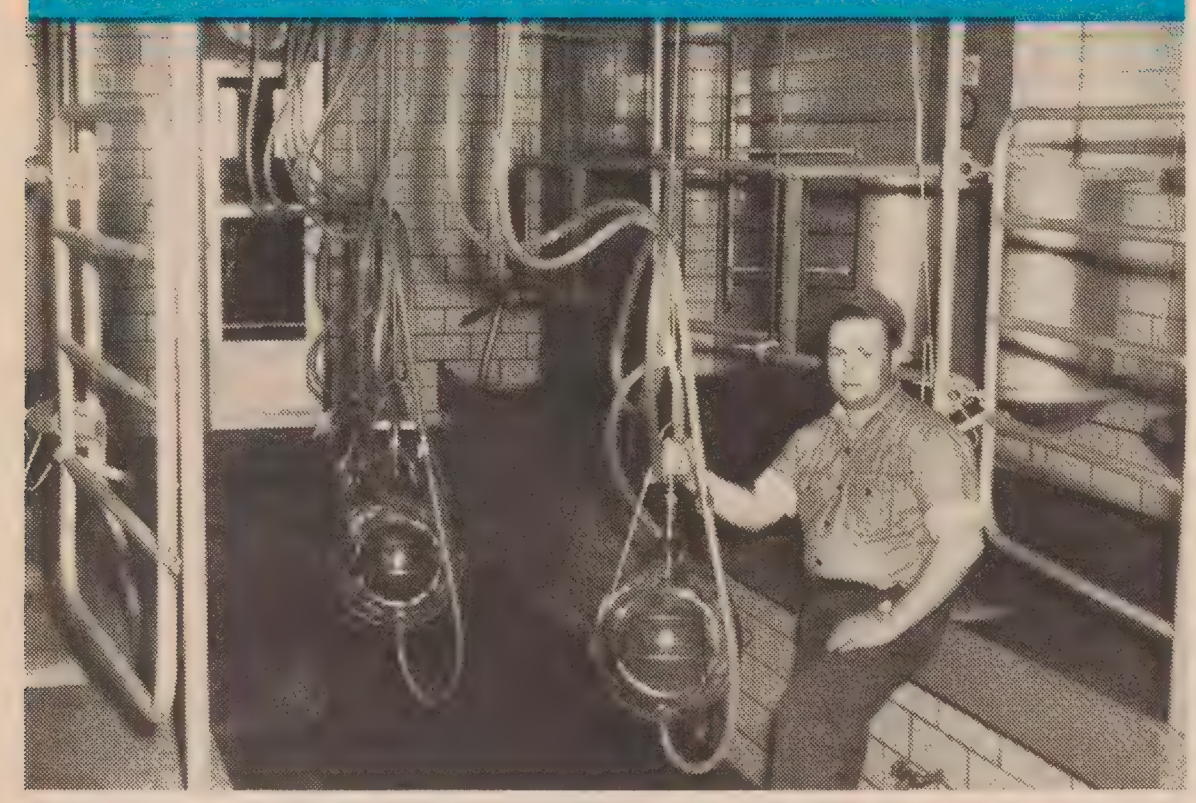
"Since Changing To BOU·MATIC Milkers We Have Practically Eliminated Mastitis From Our Herd"

Writes DAVID PIERCE, Oxford, Pennsylvania



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"Since changing to Bou-Matic Milkers we have practically eliminated mastitis from our herd and cut our milking time almost in half!"

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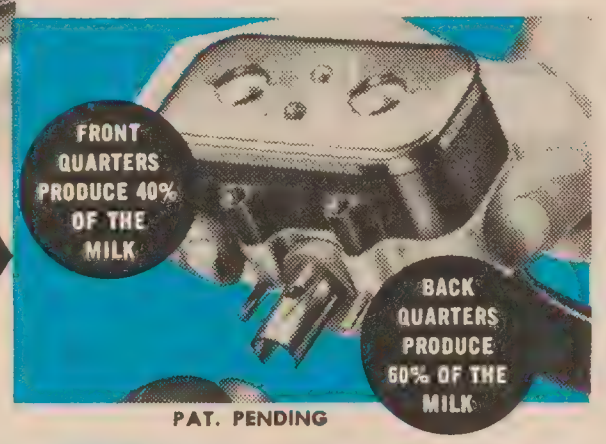
Whether you are milking 15 cows or 1500 it will pay you to investigate what Bou-Matic can do for you and your herd. A Dari-Kool Bou-Matic Milking System along with good herd management has proved a winning combination for thousands of dairymen. Ask any Dari-Kool Bou-Matic user.

These BOU·MATIC Features Can Help You Enjoy BETTER RESULTS!

PAT. PENDING

VISI-CLAW lets you see when milk flow stops for prompt removal of teat cups. Helps prevent over-milking. Reduces irritation.

ALTERNATOR PULSATOR milks front and back teats more evenly, reducing udder irritation.



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America's Fastest-Growing Milker

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☐ Please send Free Cow Preparation Folder.

☐ Please send Dari-Kool Bou-Matic Literature.

NAME.....

ADDRESS.....

TOWN.....STATE.....ZIP.....

☐ I am a student.

Dollar Guide

For The Northeast Farmer

THE USDA has issued a final decision on amending six eastern federal milk marketing orders to change the pricing of bottling (Class 1) milk to farmers. The Class 1 price to farmers each month under each order shall be the price stated in each order plus any amount by which the average Minnesota-Wisconsin manufacturing milk price for the preceding month exceeds $4.33. The Dairymen's League estimates this action will raise the September Class 1 price by 12 cents per cwt. in the six orders.

WILLIAM J. RASMUSSEN, owner of Sarival Guernsey Farms of Glendale, Arizona and producer of "Go," a filled milk product, recently filed suit in Phoenix for triple damages of $187,323 against American Dairy Association, United Dairymen of Arizona and Arizona Milk, Inc., charging restraint of trade. He alleges that "an intensive advertising campaign against 'filled milk' has severely damaged his business." He said that he sold 863,367 gallons in half-gallon containers in 1968, but his sales dropped to 104,835 gallons during the February-July period in 1969.

This should encourage dairymen to advertise milk and dairy products!

WHEAT ALLOTMENT acreage for 1970 has been cut by 12 percent from '69 figure ... from current 51.6 million acres to 45.5 million. The U.S. average farm price for wheat in July dropped to the lowest level in more than 25 years. National average price-support loan level for 1970 will be $1.25 per bushel. Allotments under 19.2 acres can be diverted 100 percent for pay.

World wheat over-supply situation has already led to violations of the International Grains Agreement, and to bitter price-cutting competition among major producers, including U.S. Problem is typical of situation where commodity is in surplus, and where suppliers have supposedly agreed on minimum price, but not on market share "belonging to" each one.

SOARING TIMBER NEEDS offer unusual opportunity for profit from your woodlot. Contact your area forester, or write Forest Service, USDA, Washington, D.C. 20250, and ask for publication PA-901 for good advice.

UNEMPLOYMENT INSURANCE may now cover farm employees in New York State if farmer wishes. For details, write Division of Employment, State Office Building, Campus, Albany, N.Y. 12201.

THE USDA recently announced its decisions on proposals regarding the inclusion of poultry in cooked sausage products. Up to 15 percent of poultry meat may be included in these products. When poultry is included, it must be named in the list of ingredients on the package. Larger amounts of poultry may also be included in the cooked sausage products if ... following the labeling requirements already in effect ... the product name clearly shows its presence, as, for example, "Frankfurter with Chicken."

U.S. FARM INCOME in the first half of 1969 was at the annual rate of 15.6 billion dollars, up 7 percent from the same period a year ago. With the number of farms declining, the net income per farm is likely to exceed the 1966 high of $5,044. This increase reflects substantially higher prices for livestock and livestock products.

AVERAGE U.S. FARMER produces enough food, fiber and tobacco for 37 Americans, 5 persons living abroad, and himself. This is about four times more than the 1940 total of 11, and 64 percent more than for 1960.

A minute's labor buys more food for consumers than it did even a few years ago. For example, in 1959, 16.2 minutes of factory labor bought a dozen eggs. Now, only 9.7 minutes buys the same.

FRUIT

Bird Control — Protective bird netting is a control method that all fruit growers should look into. Several kinds of netting are available. A list of manufacturers is available from your agricultural Extension agent, or by writing the U.S. Fish and Wildlife Service, Box 150, Albany 12201.

Apple — An apple with a promising future is "Splendor," a new late-season variety which could fill the gap in apple production for a later-ripening, high-quality apple to extend the harvest period.

First developed in New Zealand and under test since 1961 in different apple areas of the U.S., Splendor appears to have inherited the best flavor, texture, production and storage characteristics of its parents, Golden Delicious and Dougherty.

Pomologist Roger D. Way of the New York State Agricultural Experiment Station, reports that Splendor has an excellent potential for becoming a commercially important variety.

Fruit Book — Fruit Growers will be glad to know that a new 1969 edition of "Modern Fruit Science," by Dr. Norman F. Childers, is now available from Horticultural Publications, Rutgers University, New Brunswick, New Jersey 08903. Dr. Childers estimates that 30 percent of the book is new. Fruit growers familiar with the first volume will be sure to find this expanded edition very helpful and informative.

Harvesters — Gilbert Smith, county agent who works with grape growers in the Finger Lakes area of Central New York, reports there will be 8 or 9 mechanical grape harvesters working in that area in the fall of 1969. The cost per machine is in the neighborhood of $23,500. This will mean some joint ownership by two growers, and others will do custom work to spread the cost over more output.

In the Chautauqua grape area, Gil reports that the average machine harvested 250 acres in 1968. The Finger Lakes region is hillier, and generally has shorter rows, than the Lake Erie area . . . but Central New York has a broader spread in variety maturity, extending the harvest season.

Another trend that is making headway is the move toward bulk handling of grapes to wineries or juice processors. Traditionally, grapes have been moved in baskets . . . more recently plastic ones that would stack conveniently. It looks, though, that the next step is the use of pallet boxes like the 20-bushel ones used for apples.

Frost Protection — Cornell University researchers think that foam, a cloudlike mass of tiny air bubbles made of detergents, could head off frost damage to strawberry plants by preventing heat in the soil from dissipating during frosty nights.

A device capable of producing large quantities of foam has been built and it is estimated that foam can be produced economically. Among other advantages, the material can be applied quickly on short notice whenever frost is predicted.

Using foam as a frost-fighter was first tried at Louisiana State University. The Cornell researchers hope to refine the technique and do further experimentation.

Prof. Everett D. Markwardt (right) built the foam-maker being manned by Samuel Baughman.

Foam is sprayed on strawberry plants in Cornell University experiment to see if it protects the plants from frost.

take a second look...

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OCTOBER GARDENING

by Doc and Katy Abraham

When Publisher Jim Hall asked us to join forces with the American Agriculturist, we leaped at the chance, for the AA has been in our household for nearly 35 years. We hope our new department will meet your needs, and if you have problems on indoor and outdoor gardening, I hope we can help you with them. We also hope you'll feel free to send us your hints and tips on gardening, so we can share them with other AA readers. Write and tell us how you like our service and how we can improve it.

Keeping Green Tomatoes — Last year some readers told us they kept green tomatoes in a fresh state right up until Christmas. How? They pick them green and free from blemish, wash them in a solution of weak household bleach, then dry thoroughly and place in a cool, dark place. A pantry or cellar shelf is fine.

Store the fruit one layer thick and sort them every three or four days, discarding the bad ones. Handle each tomato carefully, and you'll find they keep better with stems off. Some gardeners wrap each tomato in wax paper; another trick is to pull up a whole vine by the roots and hang it upside down in the cellar or garage. Incidentally, there's no merit to putting green tomatoes in a window to ripen.

Bonus for AA Readers — As a get-acquainted gesture, I'd like to send each AA family a free copy of my bulletin, "Tricks for Using Green Tomatoes." This folder is a boon to gardeners who still have a lot of green tomatoes and don't know what to do with them. It tells how to make relish, mincemeat, sandwich spread, green tomato pies, dilly green tomatoes, and dozens of other mouth-watering dishes.

Just send a self-addressed, stamped envelope to **Doc Abraham, Box 370, American Agriculturist, Ithaca, N. Y. 14850.**

Poinsettia Care — Will your kept-over poinsettia blossom by December 25? It will if you keep it out of artificial light at night. Why does night light prevent blooming? I'll explain. The poinsettia is a tropical plant, and in the fall it needs a short-day, long-night schedule.

In the subtropics, nature takes care of this, but in a living room that's lighted, the plant is likely to get just the reverse and will be retarded. So put the poinsettia in a dark hall, or cover with black plastic at night and uncover at 8:00 a.m. next day. Continue this treatment until about the first of December.

Plant a Tree — Fall is a good time to plant a tree or feed your trees. Did you know that trees are nature's "garbage collectors"? Trees take in carbon dioxide (a waste product from humans, auto exhausts and fuel burning) and give off oxygen. Trees are also good air conditioners.

If you picked the leaves of an average-size maple or oak and laid them flat on the ground, they would cover four acres. America should plant 10 trees for every 100 automobiles and 100 trees for every truck on the road! And trees, unlike most things you buy, increase in value. A tree that costs you $5 today may be worth from $100 to $200 in 10 or 15 years.

Trees can cut your fuel bills in winter and make your home cooler in summer. A properly located tree can reduce summer room temperatures as much as 20 degrees. Trees not only eliminate the "attic furnace," but by acting as a windbreak, will also cut your fuel bill by as much as 30 percent.

To heat an ordinary house, it takes twice as much fuel at a temperature of 32 degrees and a wind of 12 miles per hour as it does at the same temperature and a wind of three miles per hour.

Ask those boys who stepped on the moon what they think about green plants. They'll tell you that the earth is still a good place to live and we should do all we can to keep it clean and green.

Garden Clinic — A reader writes, "The geraniums in our porch box are still wonderful. Can we take cuttings from these, or should the plants be discarded?"

Answer — Take cuttings 4 inches long and root them in sand,

(Continued on page 21)

Reduces vibration 90%*

You're witnessing a dramatic demonstration of McCulloch's new *Cushioned Power*—an exclusive McCulloch extra that reduces vibration 90%.

Look closely at the illustration. Notice that the chain saw has been photographed while actually sawing a log. Notice, also, how the water is jiggling and spilling from the glass glued on the starter housing. Now, look at the water in the glass on top, *where your hands hold the saw.* Pretty calm!

That's the result of McCulloch's exclusive new feature—*Cushioned Power.* Five rubber mounts cushion the engine... isolate vibration... soak it up before it can reach your hands and arms. What's more, they serve to keep the fuel tank and carburetor cool, prevent engine heat from reaching the handle and grip, hold the guide bar steadier. Only McCulloch stops vibration so effectively. The result: you cut faster, smoother, more evenly—with far less fatigue, strain.

McCulloch's *Cushioned Power* is standard equipment on our new CP 55 and CP 70 saws. Automatic direct-drive, with 3.3 and 4.3 cu. in. engines respectively, they deliver big saw power. Both are equipped with automatic oiling, and with McCulloch's new "Sound Silencer" Muffler that cuts overall engine noise up to 50% and high frequency noise as much as 75% when compared to standard cavity type mufflers. And, of course, they're both equipped with top quality McCulloch chains and bars for top performance.

Ask your McCulloch dealer to show you the dramatic "Smooth Water" test of *Cushioned Power.* He's in the Yellow Pages under "Saws."

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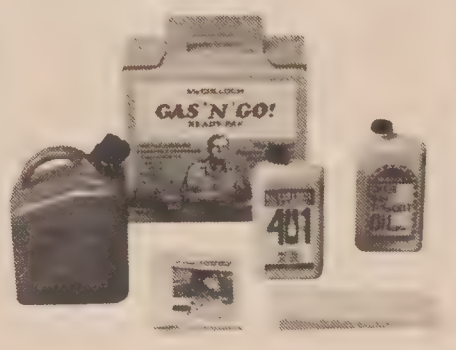

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*Comparison made to chain saw of similar size, displacement and engine balance not equipped with "Cushioned Power" vibration isolation system.

McCulloch

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VEGETABLES

Chapin Watering — Engineering information, tables for system design, and helpful suggestions are some of the subjects covered in a brochure on automatic watering equipment for greenhouses by Chapin Watermatics, Inc. A copy may be obtained by writing to the company at 360 North Colorado Avenue, Watertown, New York 13601.

Yearbook — The new 1969 American Potato Yearbook is off the press. Many important references, and pages of useful statistical data, provide a valuable reference for the potato farmer. The revised Onion Supplement contains a list of onion associations, references, research workers and other vital onion statistics. Copies may be secured from: American Potato Yearbook, P. O. Box 398, Westfield, New Jersey 07091. Price is $2.50.

Potato Picture — The acreage of Maine potatoes entered for seed certification continues downward. The Maine Department of Agriculture reports that 1969's acreage of 75,314 is 13.4 percent less than in 1968, and the smallest for the past five years.

The three leaders. . .Katahdin, Russet Burbank and Kennebec . . . accounted for nearly 90 percent of the decrease in a total of more than 34 varieties entered for certification. Also declining is the old standby, Irish Cobbler.

Sharp increases, however, were noted in the Superior, Pungo, Lenape, Alamo and Wauseon . . . the latter highly resistant to golden nematode. Being test grown for an earlier, more disease resistant and higher quality potato for table use and processing are such new varieties as Bake King, Norchip, Peconic and Reliance.

GARDEN FILM

"Beauty and Comfort Outdoors," a free, non-commercial, 16mm-sound-color film presented by the National Sprayer & Duster Association, tells you how to do away with undesirable insects, weeds, and plant disease by spraying, fogging, and dusting.

You can obtain a print on a free-loan basis for a group showing by writing: Modern Talking Picture, 1212 Avenue of Americas, New York, N.Y. 10036. They will refer your request to their film library in your area.

BEATS THISTLES

Clarence Carlson of Jamestown, New York, takes care of bull thistles in his lawn by cutting them off with a knife, splitting the root stub left in the ground, and pouring a dab of turpentine into the split. Other readers report using the same procedure, but using brush killer instead of turp.

A film entitled "Land in Jeopardy" won the 1969 Farm Film Foundation Award in nationwide competition. It is based on a study by the former New York State Commission on the Preservation of Agricultural Land . . . now replaced by the Agricultural Resources Commission.

The color movie illustrates the need for better planning for more orderly urban expansion without seriously disrupting farming in New York State. It includes extensive footage of aerial shots taken in many parts of the state.

Richard G. Turner, educational film producer at Cornell University, produced the 19-minute film, and won a $500 prize from the American Association of Agricultural College Editors for his efforts.

Empire Staters can obtain the film for loan through their county agricultural agents.

Gardening . . . . .

(Continued from page 20)

perlite, or vermiculite. An 8-inch pot full of sand makes a good "propagator," and if you place a plastic sheet (such as laundries use) over the plants, it will maintain proper humidity by acting as a mini-greenhouse.

We'll be happy to send a free copy of our bulletin, "How To Keep Geraniums Over Winter," to our AA readers. Please send a self-addressed, stamped envelope to the address given above. And when writing, please tell us how you like our column. This is your department, and the more you use it, the better it will be.

Holds 240-bushels, turns shorter, costs less!

Here's Badger's New Spreader

Good News! Badger has just announced two new high-capacity, low-cost manure spreaders.

The Badger Model BN-200 has a 200-bushel capacity. The Badger Model BN-240, a 240-bushel capacity. Both spreaders are shorter in length than most competitive spreaders of comparable capacity. This means greater maneuverability, less storage space.

In addition to providing all the important features of higher priced competitive models, the new Badger spreaders are ruggedly built to Badger's high standards of quality. Both models feature an extra strong apron made of 667-J pintle chain and extra heavy removable combs in the rear beater for long life and easy maintenance. And, the gear box is an oil bath, bevel gear type for continuous trouble free service.

See your Badger Dealer. He has these new spreaders now. They are one more example of what we mean when we say: *"Badger Makes Things Move."*

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Dr. Naylor's **BLU-KOTE**

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Dozens of uses for all farm animals... Blu-Kote is an antiseptic, protective wound dressing that combats both pus-producing bacteria and common fungus infections. Covers the wound with quick-drying, penetrating coating, dries up secretions, controls secondary infection.*

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Dauber works best for treating Cow Pox sores you can reach with it. Application for Ringworm around eyes and face of dairy animals is better controlled with dauber. 4 oz. dauber bottle . . . $1.00 at dealers or mailed postpaid.

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For years we have said that our Hawaiian Holidays are "trips to paradise" (and so they are), but now what do we say about a South Pacific vacation which includes not only Hawaii but also Tahiti, Fiji, Samoa, New Zealand, and Australia? How does one describe the superlative of "paradise"? We'll just invite you to come along on our **South Pacific Paradise Holiday** from **March 19 to April 24** and find out for yourself.

From all parts of the country, we travel to Los Angeles for the start of this fabulous vacation and then fly to **Tahiti,** land of matchless tropical scenery and charming, uninhibited people. For four days we will enjoy Tahiti's many attractions—shopping and strolling in Papeete, trips to the two neighboring islands of Moorea and Bora Bora, native feasts, and entertainment.

Leaving Tahiti, we cross the International Date Line on our way to Auckland, largest city in **New Zealand.** While here we will go to Waitomo Caves to see the unique Glowworm Grotto, where the cavern's entire roof is studded with lights of a million glowworms. We will visit Rotorua with its boiling mud pools, geysers and springs; here are also Maori settlements where descendants of early Polynesian navigators have preserved much of their cultural past — ways of living, carvings, music and dances.

Next comes Christchurch on the South Island. This is said to be the most British town outside of England. On South Island there are sights we would never expect to find in this area—snow-capped peaks of the majestic Southern Alps, rugged spectacularly beautiful fjords, and two eight-mile-long glaciers. Truly New Zealand is the "Wonderland of the South Pacific"!

We will spend 15 days on the **Island Continent of Australia,** and it is possible to mention only a few of the many places we will visit. They include Hobart and other cities in Tasmania, Melbourne and a side trip to Cowes on Philip Island to see the fairy penguins march from the sea at dusk; Canberra, one of the world's few completely planned capitals; Sydney, oldest and largest city of Australia and busiest port in the Southern Hemisphere; Brisbane and the Lone Pine Koala Sanctuary where you can hold one of the cuddly bears, and Surfers Paradise on the Gold Coast. Here is an opportunity to really see the "Land Down Under."

After Australia comes **Fiji** where we will visit all the interesting places in Suva, the capital city, and have time for swimming, duty-free shopping, and deep sea fishing for those who are interested.

On our way to Pago Pago in **American Samoa,** we again cross the International Date Line and gain back the day lost earlier. In Samoa we will drive through picturesque villages, enjoying the unhurried way Samoans live and work. A highlight of one day will be a late afternoon native feast.

Hawaii is the final attraction on our South Pacific vacation. Here we will take the Circle Island Tour of Oahu, cruise through Pearl Harbor, and have time to lie in the sun on famous Waikiki Beach and stroll along fashionable Kalakuau Avenue. The only meals not included in the price of this month-long va-

(Continued on next page)

Gordon Conklin, Editor
Box 370-T
Ithaca, New York 14850

Please send me without obligation on my part, the following tour itineraries:

South Pacific Holiday_____ Reunion Weekend_____ Southwest Holiday_____

Oberammergau Folder_____ Caribbean Cruise_____

Name _____

Address _____

_____ Zip _____

(Please print)

Dates to Remember

Sept. 30-Aug. 5 - Massachusetts Horticultural Society Harvest Show, Boston Common, Boston, Mass.

Oct. 4 - New York State Guernsey Sale, Canandaigua Sales Pavilion, Canandaigua, N.Y.

Oct. 5 - North Atlantic Poultry Show, Raynham Park, Raynham, Mass.

Oct. 5-11 - National Fire Prevention Week.

Oct. 5-11 - National 4-H Week.

Oct. 10 - New England Egg Marketing Association Annual Meeting, Memorial Union, University of New Hampshire, Durham, N.H.

Oct. 14-16 - NEPPCO Exposition and Convention, Chalfonte-Haddon Hall, Atlantic City, N.J.

Oct. 16 - 30th Annual Meeting Animal Nutrition Research Council, Marriott Twin Bridges Motor Hotel, Washington, D.C. (Arlington, Va.).

Oct. 17 - Massachusetts 4-H Lamb Show, Mallary Arena, West Springfield, Mass.

Oct. 17-25 - Pennsylvania National Horse Show, Farm Show Building, Harrisburg, Pa.

Oct. 19 - New England Poultry Show, Northampton Fairground, Northampton, Mass.

Oct. 21-22 - Fourth Annual Meeting on Poultry Condemnations, Salisbury, Md.

Oct. 27-31 - Annual Meeting New York State Grange, DeWitt Clinton Hotel, Albany, N.Y.

Oct. 29-30 - New York State Federation of Home Bureaus Annual Meeting, Sheraton Motor Inn, Thruway Exit 35, Syracuse, N.Y.

Oct. 31 - New England Holstein-Friesian Association Annual Meeting, Burlington, Vt.

Nov. 8-15 - 13th Annual Livestock Exposition, Farm Show Building, Harrisburg, Pa.

Nov. 9-14 - Joint Annual Meetings, American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, Sheraton-Cadillac and Statler-Hilton Hotels, Detroit, Mich.

Nov. 10-12 - New York Farm Bureau Annual Meeting, Flagship Hotel, Rochester, N.Y.

Nov. 11-13 - 31st Annual New York State Insecticide and Fungicide Conference, Alice Statler Auditorium, Cornell University, Ithaca, N.Y.

Nov. 13-14 - 51st Annual Convention New Jersey Farm Bureau, Sheraton-Deauville Hotel, Atlantic City, N.J.

Oct. 14-17 - 42nd Annual National FFA Convention, Municipal Auditorium, Kansas City, Mo.

Nov. 14-22 - Royal Agricultural Winter Fair, Royal Coliseum Exhibition Park, Toronto, Canada.

Nov. 15 - Eastern A.I. Cooperative Annual Delegates Meeting, Ithaca, N.Y.

Nov. 18-20 - National Fire Protection Association Fall Conference, Denver, Colo.

Month in Paradise

(Continued from page 22)

cation are four meals in Hawaii. This is done intentionally to let you enjoy some of Honolulu's fine restaurants.

It is impossible to adequately describe this trip to the South Seas' enchanting islands. It will be a once-in-a-lifetime experience! We hope you will send for the free, illustrated leaflet and plan to be with us when we leave for Paradise on March 19.

Other Tours

We are really excited about our tour program for 1970 and look forward to telling you about these fine vacations in future issues of **American Agriculturist.** Next month we hope to tell you about our February **Caribbean Cruise,** and don't forget our **Southwest Holiday** from January 12 to 30. A few of the places we will visit on this tour are San Francisco, Solvang, Death Valley, Las Vegas, Grand Canyon, Phoenix, San Diego, and Los Angeles.

Also, we hope you're planning to be with us at beautiful Lake Mohonk Mountain House in New Paltz, New York, for our **Get Acquainted and Reunion Mixer Weekend,** November 21 to 23. The cost for the entire weekend is just $69.00 per person!

The Passion Play

As each new decade begins, the world-famous Passion Play is held in Oberammergau and attracts thousands of people from the entire Christian world. Back in 1967, our tour agents, Travel Service Bureau of Needham, Massachusetts, were "on the ball" and reserved 180 seats (30 for each of six different performances) for the Passion Play.

Accordingly, we will offer six wonderful European vacations next year, and every person going will have a reserved seat for the Oberammergau Passion Play. Ask for the Oberammergau folder too when you send in the coupon. You won't have another opportunity to see the Passion Play for ten years.

"Milk production increased since we started using DEKALB® ensilage."

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More dairymen are spreading our Barn Calcite — most everybody calls it "non-skid" — on their barn floors and runways because it *really* takes hold . . . keeps their cows on firm footing even in wet weather . . . helps them produce all the milk that's bred into them. Lime Crest Barn Calcite also keeps floors white and clean looking so much longer . . . it's economical, easy to use, and makes better fertilizer, too.

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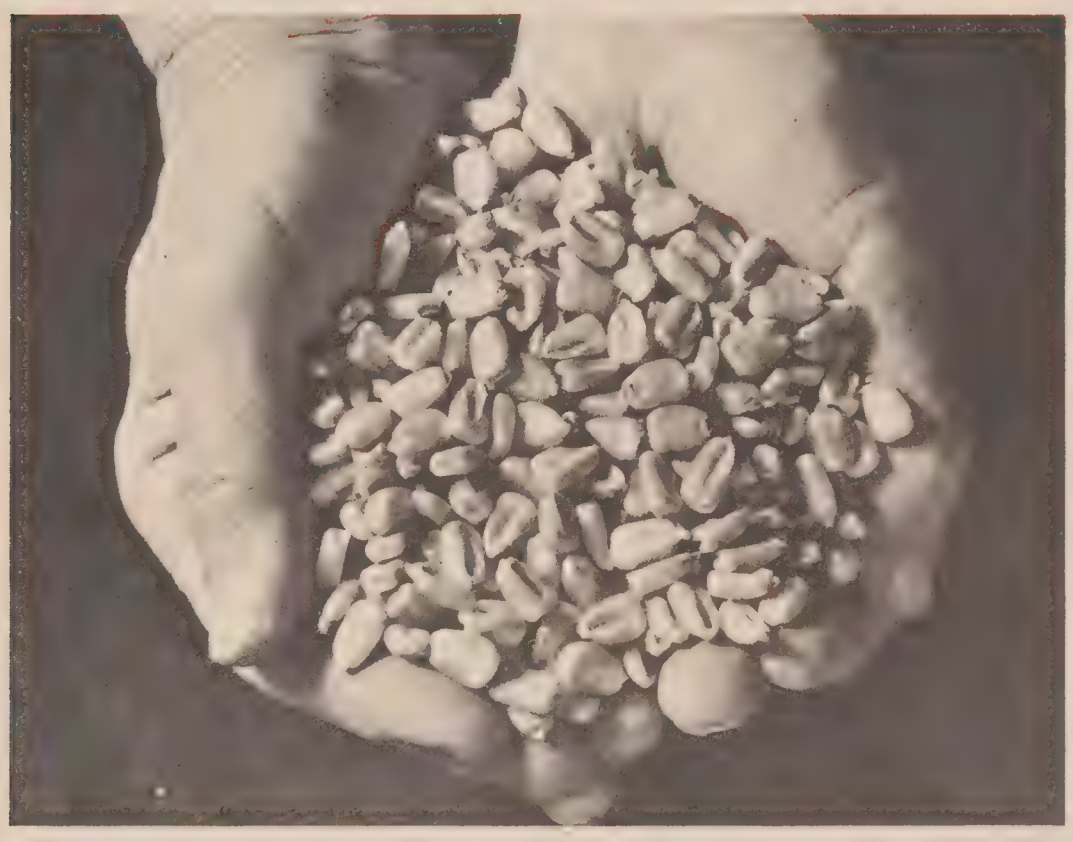

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Reserve Grand Champion — Springbrae Miss Fancy, Melody Lane Farm, Burke.

Junior Champion — Melody Lane L Honey, Melody Lane Farm, Burke.

Bulls:

Senior and Grand Champion — Melody Lane L. Challenger, Melody Lane Farm, Burke.

Junior and Reserve Grand Champion — Sun-E-Hill Lightnings Pride, Thomas Robinson, Champlain.

BROWN SWISS

Females:

Senior and Grand Champion — Venture's Sunny Lady, Venture Farm, Cobleskill.

Reserve Grand Champion — Bonnie Meadows Royal Queen, W. Stewart and Richard J. Stephens, Manlius.

Junior Champion — Top Acres Alert Dee, Wayne E. Sliker, Flemington, New Jersey.

Bulls:

Junior and Grand Champion — Vine Valley Chip's Pedro, Leon W. Button, Rushville.

Senior Champion — Lilason Hercules, William A. Wilcox, Canandaigua.

Reserve Grand Champion—My T-Fine Flash, Gary Klumpp and William Sliker, Appleton.

GUERNSEY

Females:

Senior and Grand Champion — Adohr Dorman Jayella, Henry C. Venier, LaFayette.

Reserve Grand Champion — Ansmil D Judith, Thelma and Roger H. Corbetta, Millbrook.

Junior Champion — Hanover Hill Darie Pansy, Hanover Hill Farm, Yorktown Heights.

Bulls:

Senior and Grand Champion — High Meadows N. Jericho, Henry C. Venier, Lafayette.

Junior and Reserve Grand Champion — Wandering Brook B. Paul, Stanley Murphy, Tully.

HOLSTEIN-FRIESIAN

Females:

Senior and Grand Champion — Tuckaway Tilly, Donald, Donald F. and Marcia Collins, Perry.

Reserve Grand Champion — Green Banks Admiral Mooie, James and Jay Repard, Canandaigua.

Junior Champion — Zeldenrust F M Angie, James, Gail and Simon Brewster, Jewett City, Connecticut.

Bulls:

Senior and Grand Champion— Chestlawn Marquis Victor, Bennett Farms & Merry-Air, Canandaigua.

Reserve Grand Champion — Elmore Chieftain D Fobes, Donald Tolcz, Cobleskill.

Junior Champion — Windy Mont Rocket Sovereign, George Page, Jr., Bradford, Pennsylvania.

JERSEY

Females:

Senior and Grand Champion — Golden Valiant Dancer, Henry Uihlein, Lake Placid.

Reserve Grand Champion — Milestone Design Sybil, Richard T. Seacord, Greenwich.

Junior Champion — B. Sleeper Thelmas Dream — Henry Uihlein, Lake Placid.

Bulls

Senior and Grand Champion — Brownys Masterman Jester, Henry Uihlein, Lake Placid.

Reserve Grand Champion — Givia Beacon Brilliant, Henry Uihlein, Lake Placid.

Junior Champion — Carom B. Sleeper, Henry Uihlein, Lake Placid.

MILKING SHORTHORN

Females:

Senior and Grand Champion — Homestead Bell 3d, Sharlene Leibeck, Churchville.

Reserve Grand Champion — Duchess Bonnie 3d, Champion Farm, West Winfield.

Junior Champion — Hillholm Lacy Floss, Sharon Carroll, LaFargeville.

Bulls:

Senior and Grand Champion — Marbert Blackwood King, Robert A. Brew, Bergen.

Reserve Grand Champion — White's Pride, Champion Farm, West Winfield.

Junior Champion — Marbert Monarch, Robert A. Brew, Bergen.

ABERDEEN ANGUS

Females:

Senior and Reserve Grand Champion — Eight Bells Erica 8, Eight Bells Farm, Brewster.

Junior and Grand Champion — Walbridge Primrose L, Walbridge Farm, Millbrook.

Bulls:

Senior and Reserve Grand Champion — Gambler of Walbridge, Walbridge Farm, Millbrook.

Junior and Grand Champion — Eight Bells Apollo, Eight Bells Farm, Brewster.

CHAROLAIS

Females:

Senior and Grand Champion — Nutmeg's Anastasia FR 1, E. P. Shurick, Bridgewater, Connecticut.

Reserve Grand Champion — May Paris, Glenn L. Baslow, New Milford, Connecticut.

Junior Champion — Fair Oaks Miss Avignon, E. P. Shurick, Bridgewater, Connecticut.

Bulls:

Senior and Grand Champion— Linden Prince 98, Linden Farms, LaGrangeville.

Junior and Reserve Grand Champion — Deauville of Nutmeg, E. P. Shurick, Bridgewater, Connecticut.

HEREFORD

Females:

Senior and Reserve Grand Champion — C U Mischief Miss 78, Cornell University, Ithaca.

Junior and Grand Champion —

(Continued on next page)

K F Jessica Mixer 120, Kiyiwana Farm, Stormville.

Bulls:

Senior and Grand Champion — Advance Return 7127, Amelia Peabody, Dover, Massachusetts.

Reserve Grand Champion — K F Jesse Mixer 110, Kiyiwana Farm, Stormville.

Junior Champion — K F Jesse Mixer 118, Kiyiwana Farm, Stormville.

SHORTHORN

Females:

Grand Champion — Sangamon Corornita 3rd, T. H. Snethen, Dewittville.

Senior Champion — Shirley's Nonpareil 2nd, Clarence W. Acomb, Batavia.

Junior and Reserve Grand Champion — Sangamon Bessie B, T. H. Snethen, Dewittville.

Bulls:

Senior and Grand Champion — Sangamon Highland Leader, T. H. Snethen, Dewittville.

Junior and Reserve Grand Champion — Sangamon War Admiral, T. H. Snethen, Dewittville.

STEERS

Exhibitors of champion steers in the various breeds were:

Angus — White's Black Angus Farm, Inc., Taunton, Massachusetts.

Charolais (also Grand Champion of Steer Show) — Sol N. Berman, Rahns, Pennsylvania.

Hereford — Deborah Lawrence, Perkinsville.

Shorthorn — T. H. Snethen, Dewittville.

SWINE

Champion ribbons in the swine breeds were awarded as follows:

Berkshire — Grand Champion Boar, Ken Wiley, Victor; Grand Champion sow, Franlee Farms, Victor.

Duroc — Grand Champion boar, and Grand Champion sow, Happy Acres Farm, Waterloo.

Hampshire — Grand Champion boar, Ralph Bliek, Williamson; Grand Champion sow (also named Grand Champion sow of all breeds), Happy Acres Farm, Waterloo.

Poland China — Grand Champion boar (also named Grand Champion boar of all breeds), Richard P. Sholley, Jonestown, Pennsylvania; Grand Champion sow, Clair Hartman, Grantz, Pennsylvania.

Yorkshire — Grand Champion boar, Real Farms, Inc., Tipton, Pennsylvania; Grand Champion sow, William O. Nudd, Irving.

Champion barrow — Karl Ehmer Farms, LaGrangeville.

SHEEP

Exhibitors of champion rams in the various breeds were:

Cheviot — Donna Cook, Trumansburg; Columbia — Harry Clauss, Canandaigua; Corriedale — Jack Baird, Spencerport; Dorset — Elizabeth Grey, Woodbine, Maryland; Hampshire — Three Meadows Farm, Peru, Vermont; Oxford — Vera L. Bigelow, Camillus; Rambouillet — Kenneth T. Moore, Nichols; Shropshire — Kenneth T. Moore, Nichols; Southdown — W. G. Carpenter & Sons, Jefferson, Maryland; Suffolk — Daniel Fitzpatrick, Wayland; Tunis — Colleen Fitzpatrick, Wayland.

Exhibitors of champion ewes in the various breeds were:

Cheviot — Donna Cook, Trumansburg; Columbia — Harry Clauss, Canadaigua; Corriedale — Timothy Fitzpatrick, Wayland; Dorset — Elizabeth Grey, Woodbine, Maryland; Hampshire — Three Meadows Farm, Peru, Vermont; Oxford — Glenn Botsford, Scipio Center; Rambouillet — Kenneth T. Moore, Nichols; Shropshire—Kenneth T. Moore, Nichols; Southdown—W. G. Carpenter & Sons, Jefferson, Maryland; Suffolk—Clare Gregory, Mt. Vision; Tunis—Colleen Fitzpatrick, Wayland.

ESSAY CONTEST WINNER

Twelve-year-old Cindy Lou Fields, daughter of Mr. and Mrs. Fred Fields of Sackets Harbor, captured top honors in a statewide essay contest sponsored by the Supervisors' Association of the New York Dairy Herd Improvement Cooperative. More than 30 contestants from 9 to 15 years of age entered essays on the topic, "What the DHIA or OS Program Has Done for Our Herd and Our Family."

Cindy's prize, a registered Holstein calf from the tested and classified Sterlingdale herd of Mr. and Mrs. Warren Campbell of Sterling, New York, will be a welcome addition to her family's 220-acre dairy farm.

Pictured with Cindy Lou Fields are DHIA directors, from left: Allen Woodward, Gouverneur; George Van Alstyne, Chaumont; and Robert Mules, Red Creek.

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Doc Mettler Comments On:

HORSE FOOT CARE

HAVE you ever stopped to ponder on the way the various animals developed for their own special functions? Just the difference in the development of the hoof on the horse, cow, goat and deer from what at one time millions of years ago was a five-toed animal is a fact that is difficult to comprehend.

The horse has the most complex hoof . . . developed, it would seem for speed. He is actually walking on the tip of one large toe. This toe is well protected, yet it must expand and contract to force blood out of the foot and back up the leg.

Each time the normal horse steps down he puts weight on the frog, a spongy triangular part of the sole. This frog, as it is flattened, expands to the side and pushes onto the bars of the hoof and the whole heel of the hoof spreads out. At this time blood is forced out of the foot.

As the horse takes the weight off the hoof, the heel contracts and again forces blood up out of the hoof to the veins of the legs and on to the heart. In other words, each stride the horse takes has a double-pumping action leading some people to say that "the horse has five hearts."

Like Nails

The wall of the hoof is much like the nail on your finger, with the outside being insensitive to pain, and the under side extremely sensitive. From the outside in, we have various layers. The extreme outside layer is the shiny varnish-like periople. Next comes the horny layer, then insensitive laminae which connect to sensitive laminae.

The laminae can be compared to sliding the edges of two decks of cards together. One deck of cards is the sensitive, the other the insensitive. There is a rich blood supply to the sensitive laminae, and when a horse develops laminitis (or founder), blood, for various reasons, gets forced between the two sets of laminae. If you have ever hit a fingernail with a hammer and had it turn blue, you know what laminitis feels like.

Where the wall turns back along the edge of the frog it is called the bar. There are various theories on whether the bar should be trimmed or not trimmed, or how deep it should be cut away at shoeing time. Let your horseshoer decide this. It may be that some hooves need the bars trimmed and others don't.

Coffin Bone

Under the sensitive laminae are more blood vessels and the coffin bone, or third phalanx. This corresponds to the last bone in the tip of your finger. In chronic laminitis, this coffin bone is pushed down and out of position so that the horse is walking on the toe or tip of the bone. The hoof grows forward instead of downward and we end up with a horse or pony with a hoof shaped like a ski boot.

At the bottom of the foot, except where the frog and the bars are, is the sole. This sole grows downward or thickens without wear, and is normally almost soft. Around the edge of the sole, between it and the wall, is the "white line." This is the horseshoer's landmark. He never puts nails inside this line, or he hits the sensitive laminae.

Small Space

Look at a horse's foot sometime and see how narrow a border the shoer has to work on. This is only one reason why it takes great skill to put a shoe on properly. Also, this is why, when you let a horse's foot break back so short that there is no place left for a nail, the shoer has such a difficult time.

The coffin bone in the foot is attached to various ligaments and tendons. One of the most important is the flexor tendon which passes over the tiny novicular bone as it reaches the back lower surface of the coffin bone. This tiny novicular bone is canoe-shaped, about one to one-and-a-quarter inches long, three-eighths inch wide, and a quarter-inch or less thick.

This little bone is under great pressure between the coffin bone, the second phalanx, and the tendon. Any tiny amount of arthritis here can cause extreme lameness in the horse. A nail puncture

(Continued on next page)

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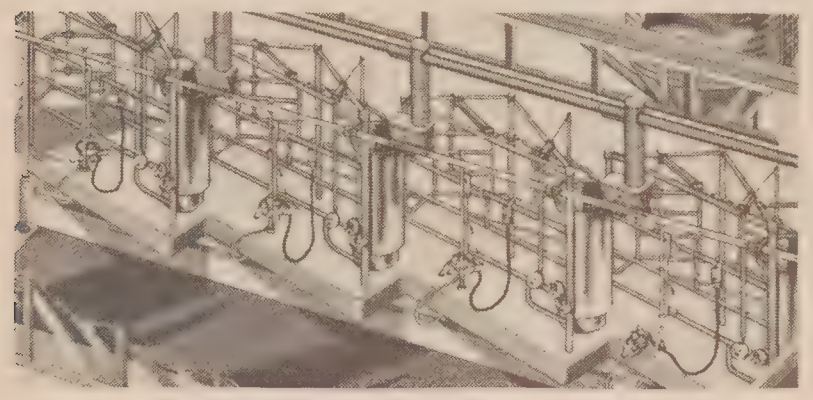

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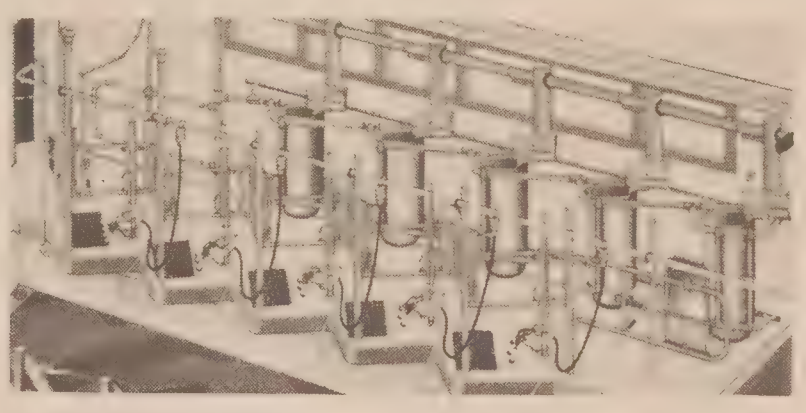

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through the frog in this area is apt to cause permanent lameness.

Long ago man learned to put shoes of one sort or another on the horse to protect the hoof. Sometimes unskilled or improperly trained shoers will do great harm to a horse by doing things that interfere with nature. The wild horse running on sod kept his feet worn down enough, but since he wasn't on hard, stony surfaces he didn't wear them down so far that they broke back too far.

Most men shoeing horses today are well trained and understand the anatomy of the horse's hoof. Shoeing horses is more of an art than a science, and due to this some shoers are more skilled than others. Along this same line, some shoers specialize in certain types of shoeing, such as five-gaited saddle horses, runners, trotters, pacers, etc.

Very often criticism of a shoer by an owner actually shows that the owner doesn't understand what the shoer knows about the horse. You can't neglect a horse's feet and expect a perfect job of shoeing. Neither can you neglect a foal's feet and expect that it won't have trouble later on in life.

Trim Early

By three months of age, foals' feet should be trimmed by a good shoer and this should be repeated as often as necessary. Not only will you end up with a better-footed horse, you will also have a two-year-old that stands quietly for you (or anyone else) to examine his feet.

At a later time, I'd like to say more about feet on cattle and more about legs on horses and cattle. Before anyone can understand the abnormal things, such as lamenesses, he must learn to recognize the normal.

Look at normal hooves and learn all you can about them. Try to remember what a normal, well-worn, unshod foot looks like and try to keep your animals' hooves in this shape.

Whenever someone comes up with an idea that bars should be trimmed out, or the periople rasped off, or any of a dozen other theories, listen to them and see if it makes sense. Always remember, however, that every time you try to change nature you have to do something to compensate for it. If still in doubt, stick with nature.

The main personalities featured at the Charolais Field Day at Karimor Farms from left: Joe F. Sherman, host and president of the Pennsylvania Charolais Association; Edward P. Shurick of Nutmeg Farms, main speaker; Dr. Robert A. Long of Rhinebeck, New York, featured speaker; and Dr. James Hubbard of Cazenovia, New York, president of the Colonial Charolais Association.

Silage Additive — Pro-Sil, developed by three Michigan State University scientists, uses anhydrous ammonia (cheaper than presently-used urea) as a protein source for livestock feed. It also has the required minerals to balance a growing ration composed primarily of silage. The compound has been tested on sheep, dairy cows and feedlot steers for two years and further tests are being conducted to discover its full potential. For more information, write: Joseph J. Marks, 109 Agriculture Hall, Michigan State University, East Lansing, Michigan 48823.

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Food For The Spirit

by Robert Clingan

LIFE HAS ITS SEASONS

The writer of the book of Ecclesiastes in the Bible says in Ecclesiastes 1:1, "For everything there is a season . . . " and in 3:11, "He has made everything beautiful in its time."

Those of us who live in this section of the world are very conscious that we live in a world of seasons. Our seasons come and go, each completely different from the season that preceded it and the one that will follow. Still, as the writer says, "For everything there is a season," and "He has made everything beautiful in its time."

What we often overlook is that our personal lives also have their seasons. Each life has its time of sowing seeds and feverishly gathering in the harvest, and other times of waiting for that to which we have given ourselves to show signs of growth.

There is the old story of the explorer who found his native carriers resting beside the trail and asked them what they were doing. With their primitive wisdom and childlike poetic expression they said, "We are waiting for our souls to catch up with our bodies." As carriers in a caravan, they knew that there was a seasonal time of exertion and rest . . . push and stop . . . climb and wait. They knew something about living out life in its seasons.

From another standpoint, every life has its peaks and valleys, its high places and its low. It was Gibran, the Syrian poet, who said that life's deepest sorrows deepen the cups of our lives that there may be more room for the joy that may some day come.

When we think of the peak experiences of life in either achievement or emotional exhilaration, we must honestly recognize that we cannot live at that level all of our days. That pace we cannot stand, nor can that exhilaration long continue . . . but neither can we live without these peak experiences that mean so much to our existence.

A western traveler once said that on part of his trip he was kept going by the peaks he could see in his windshield, and the peak that he could see through his rear-view mirror. To a certain extent this is true. We live by the peaks we have climbed, and by peaks we still hope to attain. The experience of what lies behind gives us the courage to try the next one ahead.

It may be a different kind of peak as our lives mature, our interests change, our values find a different point of reference, or our compass is realigned with the true north by which we want our lives pointed. The whole scheme of life is filled with its seasons. Like the world of nature, "Everything has its season" and "He has made everything beautiful in its time." Each period of life has its own kind of beauty, and its own style of living life to the full.

When we carefully examine what the writer of Ecclesiastes is trying to say to each of us, and find in it some parallel in the New Testament, we find him suggesting that we take life as it comes, live it a day at a time . . . and live it to the full according to its season.

THE BOOKSHELF

Most of the books listed in our "Farm and Home Rural Bookshelf" deal with the practical aspects of farming. But Ed Eastman's "Journey to Day Before Yesterday" still holds first place in the hearts of our readers. And the three others of his books that are still available . . . "Hostages to Fortune," "The Words and the Music," and "Walking the Broad Highway" are prime favorites also.

With the increased interest in horses, a big demand comes for copies of "Selecting, Fitting and Showing Horses," together with "Horses and Horsemanship," a finely-illustrated manual.

Following fairly closely in popularity are "Approved Practices in Dairying" and "Approved Practices in Beef Cattle Production," with its companion volume "Selecting, Fitting and Showing Beef Cattle." Running neck and neck are "Farming Programs for Small Acreages," "Farm Tractor Maintenance" and "Mechanics in Agriculture."

These are just a few of the most popular of the books in our Bookshelf. We have many orders for all of the others, too. Look the list over, and see if there isn't some book there that would help you farm better.

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BRADFORD COUNTY ANNUAL Fall Foliage Feeder Sale will be held on Friday, Oct. 10, 1969 at the Valley Stockyard Sale Barn located on Rt. 220, Athens, Pa. Steers, heifers, bulls, beef type cows and hol. heifers. Come to buy or sell or just a nice vacation. Meals served.

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Raymond Churchill (left) of Waterloo, New York, received a prize for the best exhibit in the honey and honey product show held in conjunction with the last annual meeting of the Eastern Apicultural Society of North America. Prof. Emeritus Elton J. Dyce, president of the Society, does the honors.

Mr. Churchill also won a trophy for the best comb hive at the show. Alfred J. Baptiste of Concord, Massachusetts, had the best three jars of liquid honey.

The Song of the Lazy Farmer

When Injun Summer days arrive, Mirandy starts a working drive; a little chilling in the air makes her say that we should prepare for winter, and by that she means it's time to take down all the screens, then scrub the windows spic and span; and after that, before we can put up the storms, we have to do the same with all of them things, too. She also says it's time I should start cutting up a stack of wood; when winter brings its snow and ice, a big woodpile is mighty nice, when chills runs up and down your back it's fine to hear them big logs crack.

But it is much too early yet to get myself all in a sweat with scrubbing panes and sawing wood; that work can all be done as good tomorrow or perhaps next week. Meanwhile, I only want to seek a vantage point where I can sit and just enjoy the fall a bit. There's something 'bout this time of year that fills my soul with hope and cheer; with summer fin'lly on the run, I know that field work's almost done. That thought puts spring into my step and gives me lots of extra pep . . . but that don't justify the crime of letting toil spoil autumn time.

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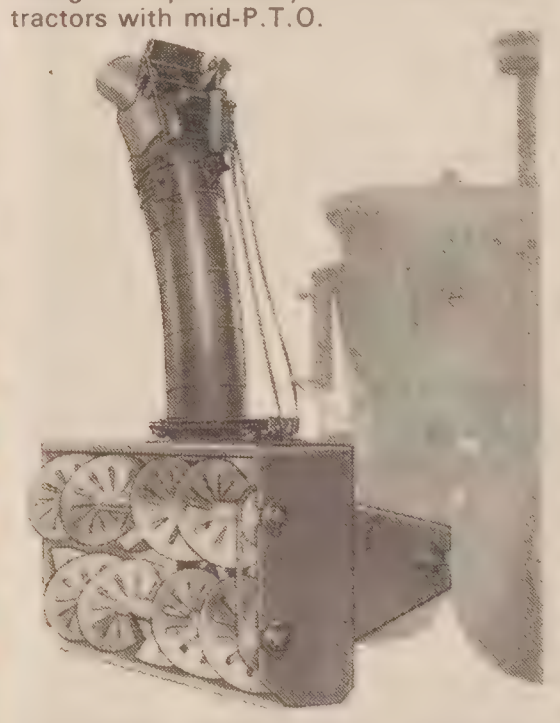

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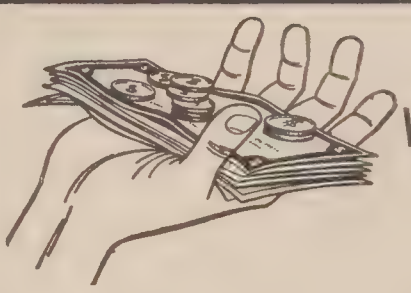

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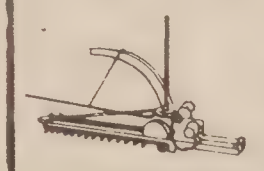
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by Augusta Chapman, Home Editor

WOULD YOU like to have a new $30,000 home without paying a contractor the current high labor costs? Then how about building it yourself? That's what Anna (Mrs. John) Sosniak of Auburn, New York, did almost single-handedly, from drawing up plans to the last swing of a paintbrush!

The Sosniaks had sold their farmhouse along with part of the land they owned in Cayuga County and moved to Florida, intending to live there. Anna liked the "Sunshine State," but John decided he didn't want to settle there permanently. So after staying a few months, they came north again. It was then, after pricing the houses for sale and looking at those for rent, that Anna made up her mind — she would build them a new home.

To keep from spending a lot of money on rent, she first fixed up a building which had once held chickens, and they lived there until the house was finished. She began the house in July 1966 and by November had all the outside work done. Then Anna and John took four months off during the winter to just "visit" Florida, with work resuming on the house in June. They moved into their home in September 1967.

The one-story house has five rooms plus two complete baths, attached garage, and full basement. The only work Anna hired done was the wiring and having the cinder block foundation laid. The latter was an attempt to save time. In telling about it she said, "I thought it would take me four or five weeks to lay the blocks, and this man promised to do it in one. Do you know how long it took him? Six weeks!"

Fine Workmanship

You really would have to see the house to believe how well it is constructed. The trim around door and window openings is perfectly mitered, with no trace of an opening at either end, and I doubt if anyone could find a seam on the walls where the panels are joined. All rafters are 2×6's except in the basement where they are 2×10's.

The inlaid linoleum in the kitchen was put down in one piece. Anna said the people at the floor covering store tried to discourage her and said it just wasn't done that way. She insisted they give her a piece of linoleum the right size and proceeded to fit it in one afternoon. Ceramic tile squares were used on the lower part of the kitchen walls and between the wall and base cabinets. Anna, of course, did the grouting.

The inside walls of the garage are panelled, and the ceiling is matched lumber. Anna apologized because the floor is slightly rough. The concrete was delivered on a blistering hot July day, and it hardened too fast for her to get it perfectly smooth.

John Sosniak works full time in Sodus, New York, which means driving a hundred miles each day. Anna does a lot of the farm work and kept this up while she was building the house. This year they had 25 acres of corn, 35 in wheat, and 50 acres of hay.

Anna had some previous building experience which helped give her confidence for this really big project. They once owned another farm in the nearby community of Fleming, and she completely remodeled the house there. Then after a fire destroyed much of the interior, she rebuilt it again. Also, she put a new basement in their barn, using 90 lb. cinder blocks.

Nor is building Anna Sosniak's only talent. She sews all her own clothes and showed me a beautifully tailored coat she'd made from a soft, crinkly vinyl material. It was very smart looking and could have come from the coat department of any good fashion shop. She also makes lovely hooked rugs and embroiders. Anna's latest venture is going into the honey business. She bought 28 swarms of bees and an honey extractor this spring; the day we visited she'd been making honeycomb frames.

We hear a lot today about conversation pieces, and for miles around people are talking about "Anna's house." I imagine they will be doing so for quite a while!

DO YOU HAVE . . .

Old movie magazines (pre 1950)? **Bob Harman, Covert Farm, Ovid, New York,** is working on a book about old Hollywood and would like these for reference material.

A copy of "Songbirds in America" or "Life Histories of North American Wild Fowl"? **Miss Jenny Lambert, R. D. 2, Otego, N. Y. 13825,** would like to buy or borrow them.

Pieces of material, dresses, and patterns of early 1900's, also broken dolls? **Mrs. Virginia Ahlen, R. D. 1, Box 38, West Rutland, Vt. 05777,** needs them for her hobby.

A light blue, three-faced salt shaker? **Mrs. Frank Stearns, R. D. 2, Central Square, N. Y. 13036,** has the pepper shaker and would like to complete the set for her collection.

Any new, old, or unusual buttons you do not need? **Mrs. Clyde Seigle, R. D. 1, Phillipsburg, N. J. 08865,** sends in this request.

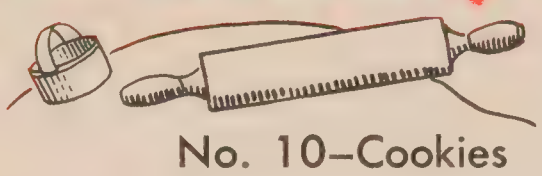
A similar request comes from **Mrs. Joseph Hebert, 15 Upton St., Springfield, Mass. 01104.**

WITCH HAZEL

by Inez George Gridley

From mustard gold to golden rod
Summer retreats on slow green feet,
Her sun-warmed arms heaped high with flowers;
Blooms she forgets are doubly sweet.
When the last leaf is scorched with frost,
It warms the heart against the cold
To find in some brown pasture lot
Witch hazel's unexpected gold.

Good Baking to You



by Alberta D. Shackelton

No. 10—Cookies

HOW DOES your Cookie Jar rate for variety? This article, the latest in our "Good Baking to You" series over the past several years, includes recipes for 9 different drop, bar and rolled cookies from three basic recipes, as well as some tips and tricks in cookie making. Suggestions and recipes for making refrigerator, pressed, and molded cookies will appear in a later issue.

Tips and Tricks

For variety, mix two or three batches of cookies at one time and bake only part of each. Keep remainder of doughs tightly covered in refrigerator or freezer and bake fresh as desired. Almost any cookie mixture with ¼ cup or more fat per cup flour may be so stored. Choose any shortening, but part butter will give better flavor. All-purpose flour is suitable for all cookies, but some cooks prefer the thinner, more delicate ones possible with pastry flour.

Cookie sheets or **inverted** shallow rimmed pans 1 to 2 inches shorter and narrower than the oven allow heat to circulate more freely for more even browning. Keep them **shiny and bright** for delicately browned crusts. Many cookies as rolled and refrigerator types may be baked on ungreased or lightly greased pans. Unsalted shortening is preferred by many bakers for greasing.

Chilling doughs prevents excess spreading in oven. Cookies **bake** best one sheet or pan at a time placed on rack in center of oven. Keep handy a second sheet, as dough will melt and spread on a hot sheet. If you must bake two pans at a time, divide oven in thirds and reverse sheets during baking for even browning, or finish browning on higher rack if desired. Avoid overbaking. Remove cookies to wire rack for cooling; avoid overlapping or heaping until cool.

Store crisp, thin cookies in can with loose cover (if softened, they may be crisped in a slow oven before serving). Store soft cookies (drop and bar) in airtight container; slices of bread, apple or orange, replaced often will help such cookies mellow and stay moist. To freeze, place thoroughly cooled cookies in freezer bags or containers and thaw before removing from packages.

Drop Cookies

Chill dough to prevent excess spreading. Drop rounded or heaping teaspoonfuls, depending on desired size, on ungreased or lightly greased pans, pushing dough onto baking sheet with another teaspoon and carefully peaking up dough.

For an extra touch, press candied fruit, date piece, raisins, nuts or gumdrop on unbaked rounds, or frost cooled baked cookies with confectioners' frosting. For an easy filled cookie, top mounds with a favorite filling and then add a little more dough.

DROP COOKIES (Four-Way)

1 cup soft shortening
1 cup light brown sugar, firmly packed
1 cup granulated sugar
2 eggs
½ cup buttermilk
3½ cups all-purpose flour
1 teaspoon salt
1 teaspoon baking powder
1 teaspoon baking soda

Cream together thoroughly the shortening and sugars. Add eggs and mix well. Stir in the buttermilk. Sift together and stir in the dry ingredients; mix well. Divide the mixture into four parts and treat in any of the ways suggested below.

Chill dough. Drop rounded teaspoonfuls of dough on a lightly greased baking sheet. Bake in a moderately hot oven (400°) about 8 to 10 minutes, or until they test done. Remove with wide spatula to a wire rack to cool. Makes about 6 dozen cookies.

Coconut Cookies: Add ½ cup shredded coconut and ½ teaspoon vanilla extract to one portion of the dough and mix well. Top mounds of dough with additional coconut before baking if desired.

Date-Nut Cookies: Add ½ cup cut-up dates, ⅓ cup coarsely chopped nuts and ½ teaspoon vanilla extract to one portion of dough and mix well. Each mound of dough may be topped with whole or half nut before baking.

Orange Cookies: Add 1 tablespoon grated orange rind and ½ teaspoon orange extract to one portion of dough and mix well. When cooled, cookies may be frosted with a confectioners' sugar frosting flavored with grated orange rind and orange extract.

Delicate Spice Cookies: Combine ¼ teaspoon cinnamon, ⅛ teaspoon cloves and generous dash of nutmeg with about a teaspoon of milk and mix well. Add to one portion of dough and mix thoroughly. Sprinkle mounds of dough with a mixture of cinnamon and sugar before baking if desired.

Bar Cookies

Easy-spread, bake, and cut bar cookies should be spread to edges and into corners of greased square or oblong pans and cut into bars or squares after baking and cooling slightly. Remove to wire rack to cool completely.

Bake only until a light imprint made with finger remains. Do

(Continued on page 37)

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7346

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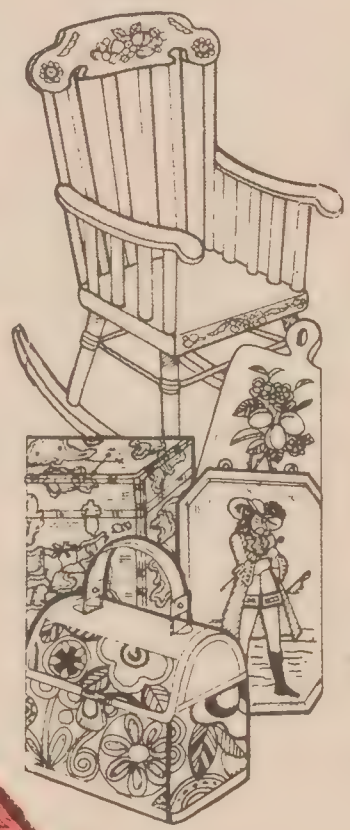
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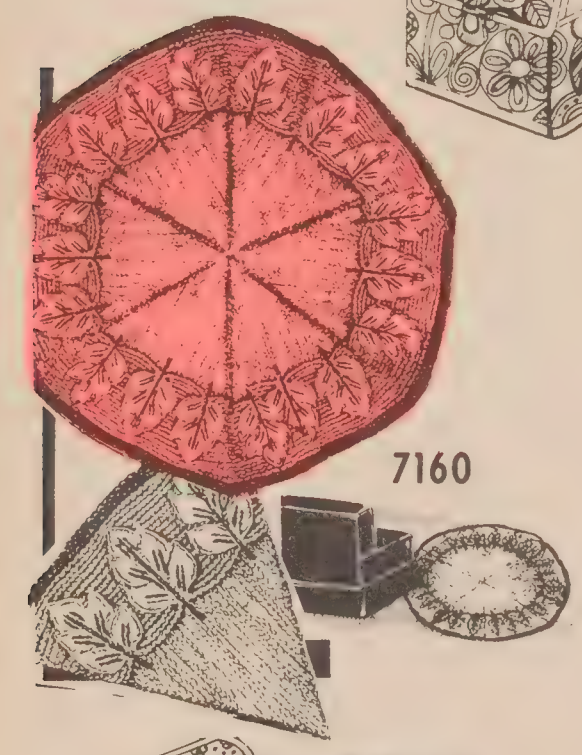
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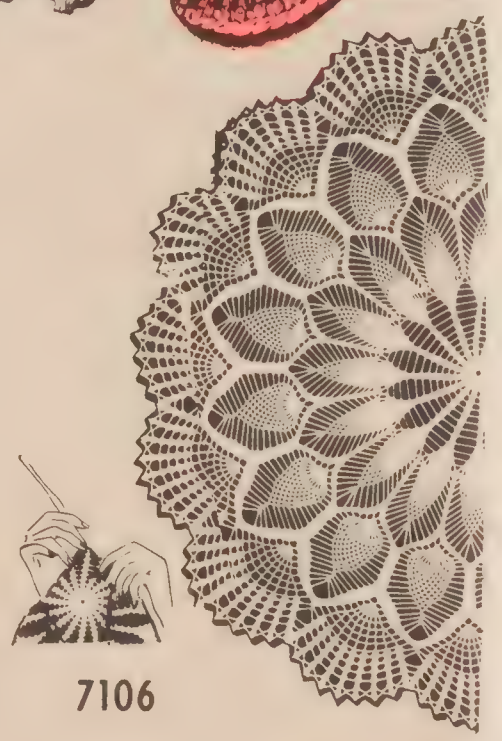
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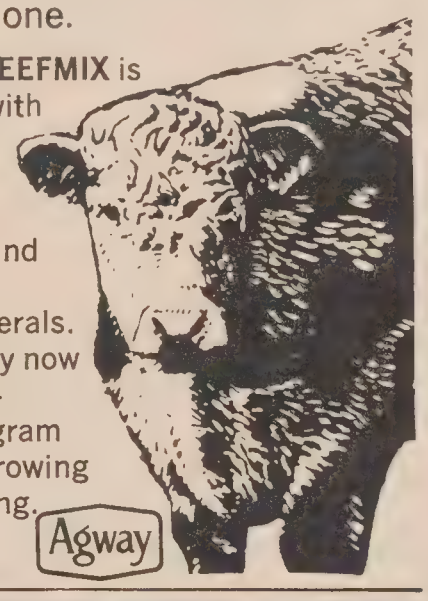

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It's easy to have your cookie jar filled with an assortment of tasty cookies when you use variations of the three basic recipes given in this article.

Photo: Dudley-Anderson-Yutzy

Baking . . . . .

(Continued from page 35)

not overbake. Dust with confectioners' sugar or frost if desired. Cut in larger squares and frosted or ice cream-topped, they make a good dessert item. Store tightly covered in baking pan or wrap in foil or plastic.

FRUIT CRUMB-CUT BARS (Three-Way)

- 1 cup flour
- ½ teaspoon salt
- 1 teaspoon baking powder
- 1 cup brown sugar
- 1¾ cups quick cooking rolled oats
- ½ cup butter
- Apricot, date or prune filling

Sift or mix thoroughly flour, salt and baking powder. Stir in brown sugar and rolled oats; mix well. Cut in butter until crumbly with a pastry blender, knife, or lightly mix with finger tips until all are well combined. Spread ½ to ⅔ of this crumb mixture over bottom of a greased 8-inch square pan, pressing down with back of spoon or fingers.

Cover with one of the cooled fillings, spreading evenly to edges and into corners. Sprinkle remaining crumb mixture over top and pat down lightly. Bake in a moderate oven (375°) about 25 or 30 minutes, until done. Cool slightly and cut into 16 squares.

Apricot Filling: Soak ½ pound dried apricots in water for about an hour. Drain and cut up. Combine with ¾ cup honey or sugar and cook until thick, stirring constantly. Chill. If desired, you may add ¼ cup chopped pecans and grated rind of 1 lemon to the cooked filling. Thick apricot preserves or pineapple marmalade may be substituted for the cooked apricot filling.

Prune Filling: Combine 1½ cups of cut-up, cooked, well drained prunes, 3 tablespoons sugar, dash salt, 2 tablespoons lemon juice, 1 teaspoon grated orange rind, and 2 tablespoons liquid from prunes. Cook over low heat, with stirring, until thickened. Cool.

Date Filling: Combine 2 cups cut-up, pitted dates and ½ cup light corn sirup. Cook over low heat, with stirring, until thick. Blend in 1 tablespoon lemon juice and ½ cup chopped nuts.

Rolled Cookies

Chill dough before rolling. Roll small amount of dough at a time, keeping rest chilled. Roll from center to edge as for pie crust; start cutting out cookies at edge and work toward center. Roll thin for a very crisp cookie, less thin for a softer one. Rolling without sticking may be easier with a canvas-covered board and stockinet-covered rolling pin; rub flour into both materials.

PINWHEEL COOKIES (Two-Way)

- 1 cup shortening (part butter for flavor)
- 1½ cups sugar
- 2 eggs
- 1½ teaspoons vanilla extract
- 3½ cups all-purpose flour
- 1 teaspoon baking powder
- ½ teaspoon salt
- 2 squares unsweetened chocolate, melted and cooled

Cream together thoroughly the butter and sugar. Beat in eggs one at a time and stir in vanilla. Sift together and add the dry ingredients, mixing well.

Chocolate Pinwheels: Divide the dough into two parts. Blend melted, cooled chocolate into one part and mix well. Chill both white and chocolate doughs. Roll white dough into an oblong approximately 8×10 inches and about ⅛ inch thick. Roll chocolate dough into an oblong slightly narrower and shorter.

Transfer chocolate dough carefully atop white dough. Press lightly together to about 3/16 inch thickness. Then roll up as for jelly roll, beginning at the wide side. You may find it easier to roll if you cut the spread dough in half.

Wrap roll in waxed paper and chill thoroughly (several hours or overnight). Freezing will make the roll slice more easily. Slice cookies ⅛ inch thick with a sharp knife and place on ungreased baking sheets. Bake in a moderately hot oven (400°) for 8 to 10 minutes. Remove with wide spatula to wire rack to cool.

Date Pinwheels: Use the above recipe. Divide dough in half. Roll one portion on a lightly floured board into a rectangle about 8×10 inches and ¼ inch thick. Spread gently with Date Filling. Roll second half slightly smaller and roll up as for jelly roll. Proceed as for Chocolate Pinwheels.

For **Date Filling,** combine 2 cups pitted dates cut in small pieces, ¼ cup sugar, ½ cup water, 2 tablespoons orange juice, 1 tablespoon grated orange rind and cook until slightly thickened, about 5 minutes. Cool and stir in ½ cup **very finely** chopped pecans.

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Ed Eastman's Page

The Country Does Not Change

I know a man who sold his house, auctioned off his furniture, moved to Florida, and bought a house there.

He told me that he never had a happy moment in Florida, and that he didn't realize how much this Northland meant to him. Fortunately, he had money enough so that he could move back here and buy himself another home.

I mention this because of my belief that most of us, particularly rural people, don't appreciate what a grand country the Northeast is. Where, in all the world, for example, could you find the glorious colors that adorn our whole countryside at this time of year?

I heard another man say recently that much of the joy went out of farming when it became big business. I do not believe this is so; it depends upon the individual. Times have changed, of course, and farming has changed . . . but the country itself is just the same as ever and it is the country where we live.

Some men can walk through life and never see much to marvel at. Another man, whether he is running a big business or a small one, will find time . . . riding a tractor or driving home a herd of cows at evening time . . . to see, hear and feel all the beauty around him.

When our children were small Belle and I took special pains when we were in a car to call their attention to the interesting and beautiful things along the road. It was not long before our small boys were doing the same for us.

Try a Game

Around the supper table tonight try playing a little game with the family entitled, "Country things I love." You will be pleasantly surprised to see how quickly your children will respond. For instance:

Who saw a robin today?

How many noticed the changing colors?

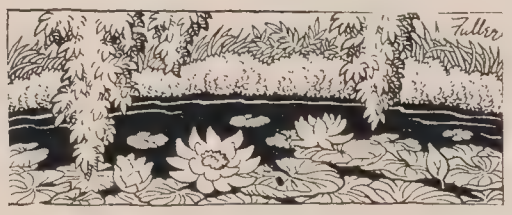
Who saw an old-fashioned corn field with shocks standing like Indian tepees?

Who saw a hawk floating overhead?

Who heard a flock of crows meeting in their fall convention?

And so on.

See who can make the longest list of "Country things I love."



Claude L. Kulp

As one journeys along the road which we call life, if he is fortunate he makes many casual friends . . . but it is only once in a great while that he makes a perfect friend. I had such a friend in the late Claude L. Kulp, who died this summer.

Claude was a man with whom you could at all times be at ease. You could talk or not talk, knowing that he would understand. He was one of the most successful educators whom I have ever known, and he had the personality and spiritual qualities to match his great success as a teacher.

In all the many years I knew Claude I never heard him speak critically of any man or woman, and yet he could always be counted on to stand and fight for the principles which he thought were right. Ithaca has one of the best school systems in the State of New York, for one reason because Claude Kulp built firm foundations in the many years when he was a teacher and superintendent of schools.

After retirement as school superintendent, Claude kept an abiding interest in education and was a consultant at Cornell University. Many a boy and girl can thank Claude for his help in improving the school system of many districts in the State.

Over the many years that I knew Claude he had the nice little custom of frequently calling me on the telephone, and he always began his conversation by saying, "Hello Ed, this is Claude."

Just a few days before his death, he and I were riding together and talking about some of life's problems, when I said to him, "Claude, do you expect to see your friends again Somewhere . . . Sometime?"

Without hesitation he answered, briefly and emphatically:

"Yes, Ed, I do."

And now he is with his friends whom he had lost a while . . . and it is my hope that when my big time comes I may be permitted to meet Claude and my other friends and hear him welcome me with "Hello, Ed, this is Claude."

GENERATION GAP

The other day I was visiting with a teenage girl friend of mine, a young lady with much good common sense, and I asked her if she thought that there really is a generation gap of any great importance. To my surprise she replied that there really is, and went on to tell me why.

"When I ask my father if I can do something," she said, he will often answer with a short 'No' and will give me no answer when I ask him why . . . or else he will say 'because I said so.' He gives me no opportunity to give my side of the case."

"Also," the girl continued, "I think young people get tired of hearing older people say 'when I was young we never acted the way you young people now do,' and yet when a group of these same older people get together they often tell stories of the escapades they were in when they were young."

That's quite an indictment, isn't it? But I am afraid that there is some truth in what the girl said. I think that much of the lack of understanding between the generations is lack of communication. This is a hurrying age and in our hurry to get things done maybe we don't make time enough for the more important things, as, for example, making continued effort to keep open the lines of communication with our sons and daughters.

CARE OF OUR OWN

It is said that when Columbus arrived back in Spain with actual proof that he had discovered new worlds, great excitement prevailed all through the land, as well it might, for the discoveries of Columbus and other explorers at that time revolutionized the world and marked a great historical period in time.

But the excitement caused by Columbus could not have been as great as when our three astronauts set foot on the moon. It was an historical event of which every American can well be proud.

But, without belittling or in any way throwing cold water on the moon project, I think the time has come to stop spending billions on air explorations, so that we are able to take care of our own, here in the United States. What do you think?

WHAT IS BETTER?

For a present, for a birthday or wedding anniversary, for any other special occasion, or for everyday reading by old or young, you can't do better than E. R. Eastman's book, "Journey to Day Before Yesterday." It brings back many happy memories to the older readers, and to the young folks it shows what life was like when grandpa and grandma were young.

One of the best proofs of a good book is the fact that many readers of "Journey to Day Before Yesterday" have written Mr. Eastman for another book like it. Try it. You will be glad that you did.

To get a copy write to American Agriculturist, Department Book, Savings Bank Building, Ithaca, New York 14850. The price is $7.30, tax included.

—M.E.R

STAND UP TO MILK

Last summer a farmer was showing me with some pride how, with the use of modern barn equipment, he was able to take care of their milking herd of 40 cows without any help. I asked him what he was going to do next to cut down the labor in the barn. He said he was now pretty nearly forced to install a milking parlor.

"Although I'm a young man," he said, "I'm beginning to realize that my knees can't stand it much longer to get up and down so many times to operate a milking machine with such a large dairy. With a milking parlor, I'll be able to stand up and do the work."

I'll bet there are hundreds of other dairymen who feel the same way. Farming on a modern scale brings new problems.

EASTMAN'S CHESTNUT

My friend, Mr. William G. MacDonald of Seekonk, Massachusetts, ninety-one years young, sends me a story that proves he can tell stories with the best of them.

"The fat washerwoman was due to be vaccinated. The doctor sterilized a spot on her arm with alcohol. She said, "Doc, will this prevent me from using my arm?"

"It might for a few days," he admitted.

"Well, then, you must vaccinate me somewhere else."

So he said, "bare your leg," and again the lady asked, "Will this put me off my feet?"

"It might for a day or two," he answered.

"Well, then," she said, "I can't allow that either. I do washings for my living and must use my arms and legs."

By now the doctor was irritated. "Where **can** I vaccinate you?" he demanded.

"Well, now, to tell the truth," she answered, "I don't get much time to set down!"

SERVICE BUREAU

For The Northeast Farmer

by M. A. Parsons

SERVICE BUREAU CLAIMS RECENTLY SETTLED

NEW YORK	
Mrs. Harry Warn, Auburn (refund on order)	$ 8.41
Mrs. Anne E. Borden, Otto (refund on book)	4.95
Mrs. Gerald Fleming, Croghan (refund on calendar)	1.00
Mr. Herbert F. Simonson, Glen Head (refund on chicks)	22.80
Mr. Joseph P. Troyan, Aquebogue (refund on parts)	21.25
Mrs. Cora Spiak, Troy (refund on dresses)	68.60
PENNSYLVANIA	
Mrs. Irvin Heitzenrater, Punxsutawney (refund on plants)	27.57
Mr. Thomas Cope, Berwick (refund on chicks)	4.25
Mr. Lloyd S. Snyder, Glen Rock (refund on membership)	5.00
NEW JERSEY	
Mrs. J. M. Bresney, Morganville (refund on chicks)	6.95
VERMONT	
Mr. Noel E. Despart, Windsor (refund on plants)	4.75

LIGHTNING RODS

"I'm writing to report a new (to me) gyp that is damaging lightning rod installations and fleecing people. On July 14th, two men came here saying they were to inspect my lightning rod system.

"We have one small building where it did need some repair. One man did that, then one thing led to another . . this and that should be done to the equipment on the house. I asked what it would cost and was told $30 or $35. When they got through, the bill (not itemized) was $98! We had company arrive just then and I told the fellow I didn't have that much cash in the house; so I paid $53 and gave a check for $45.

"After the men and my company had gone and I had time to think about it, I realized that I had been gypped. Next morning I phoned the bank and had payment stopped on the check. I also phoned the sheriff's office and reported it. It turned out that the same afternoon that I gave the crook the check he cashed it at a local garage. Now the garageman is about to take me into court and make me pay the $45 and court costs.

"Since my experience, I have heard from two sources that this lightning rod game has been going on for some time, but I had never heard or read of it. If you could write about in on your Service Bureau page, perhaps it might keep others from being fleeced and their equipment damaged. It was several days before I realized that they had taken the copper cable and replaced it with some shiny material.

"Needless to say, I am an elderly woman, and a stupid one at that. Of course, this isn't a lot of money, but one hates to be taken for any amount. The worst part is the damage which I am afraid was done."

This is the first such complaint we have had in some time and we did not realize, until we received the above letter, how long it had been since we last printed a warning about lightning rod 'gypsies."

These itinerant salesmen arrive seasonally, travel like gypsies, and offer to do all kinds of home repair jobs for unsuspecting homeowners. In addition to doing chimney repair, spray-painting roofs and driveways, they also install lightning rods.

If you are approached by lightning rod salesmen, ask if they guarantee an Underwriters Approved system, and if they are members of the U.L.P.A. You can check this by writing the United Lightning Protection Association, Box 462, Ithaca, New York 14850. It is very important that you have a contract stating that your system will be Underwriters Approved.

Don't be rushed into any job like this. Ask for credentials and references. Reputable salesmen are glad to furnish them.

Several years ago, we were told that a sizable number of incomplete lightning rod systems had been installed by these "gypsy" operators. A large number of the installations were inspected by U.L.P.A. representatives and were not in accordance with the code of Underwriters' Laboratories or the National Fire Protection Association. Such systems cannot be expected to function as lightning protection systems and could be more dangerous than no system at all, according to U.L.P.A.

We suggested to the lady who wrote us about being gypped that she would be wise to have a reliable lightning rod man check over the installation to be sure it will function if needed.

CAN YOU HELP ?

If you have a copy of Samuel Orcutt's "History Of New Milford, Conn." and would like to part with it, please contact Mrs. Paul Douskey, R.F.D. 1, Paper Mill Rd., New Milford, Conn. 06776.

* * *

Would like to obtain "The Enchanted Barn" by Grace Livingston Hill (Mrs. Lutz), published about 1923-1924 by Grosset & Dunlap. Please contact Mrs. Leonard Wilber, Cold Brook Rd., Homer, N.Y.

* * *

Mah Jong game wanted by Mrs. Chester Miller, R. 1, White River Junction, Vt. 05001.

* * *

"Idyls Of The South" by Frank Stanton. Mr. W. G. Hartin, 54 Spring St., Gloversville, N.Y. 12078, would like to obtain a copy.

* * *

Please contact Mr. Joseph Wilk, Sr., 600 Cedar Ave., N.W., Glen Burnie, Md. 21061, if you know the name of the author and words to the poem that has the following lines — "I wonder if the Christmases in Heaven reflect the joys that we have here on earth . . ."

EVERY 3 SECONDS

Someone is injured in an accident. 1968 accident facts show that the annual toll is 115,000 killed, 11,000,000 seriously injured. If you haven't had an accident — be thankful.

TRAVEL ACCIDENTS 55,200 KILLED

Motor vehicle accidents were the number one cause of deaths with 2,000,000 disabled beyond day of accident.

HOME ACCIDENTS 28,500 KILLED

Falls, a major killer, caused 40% of all accidental deaths in the home. Over 4,300,000 disabled beyond day of accident.

ONE OUT OF EVERY SEVEN

Will become a hospital patient either from illness or accident this year.

You may find a friend's name in the partial list of recent payments. They received help from their North American protection.

George Krivulka, Belfast, N.Y. — Hit by saw—cut thumb	$109.75
Chalmers Wolcott, Fillmore, N.Y. — Auto accident—mult. injuries	1032.00
Charles R. Gleason, Chenango Forks, N.Y. — Hit by paper rewinder—broke knee	327.84
Leon Wagner, Freedom, N.Y. — Stepped on by cow—inj. foot	460.00
Clyde Hallett, Jr., Conewango Valley, N.Y. — Playing volleyball—twisted foot	154.66
Charles A. Smith, Auburn, N.Y. — Washing milk tank—overcome by gas	218.40
Henry Walter, Scipio Center, N.Y. — Hit by limb—inj. eye	120.90
Albert Eckman, Jr., Frewsburg, N.Y. — Kicked by horse—broke jaw	1152.14
Andrew White, Sherman, N.Y. — Hit by ball bat—broke tooth	326.93
Roger Balmer, Pine City, N.Y. — Caught in mower—loss of finger	235.14
Ivan Eccleston, Dec'd, Pitcher, N.Y. — Tractor accident—loss of life	1800.00
J. Stanley Coupal, Champlain, N.Y. — Horse fell—multi. bruises	160.71
Joan Board, Delhi, N.Y. — Slipped into lawn mower—loss of toes	1030.74
Florence Terry, Franklin, N.Y. — Pushed into silo by bull—inj. ribs	111.40
Mark Phillips, Collins, N.Y. — Fell off slide—broke arm	286.85
Nelson Miles, Akron, N.Y. — Auto accident—broke rib	361.20
John H. Carver, Willsboro, N.Y. — Pushed by cow—broke arm	744.00
Donald J. Rushford, Chateaugay, N.Y. — Lifting on loader—internal injuries	972.96
Francis Shepard, Byron, N.Y. — Stepped in hole—bruised knee	115.70
Marion Lopat, Dolgeville, N.Y. — Caught in pad machine—inj. hand	694.89
Howard E. Hoppel, Jr., Castorland, N.Y. — Auto accident—broke ribs	796.05
Victor Stoffle, Glenfield, N.Y. — Fell in milk parlor—broke leg	932.11
David E. Miller, Lowville, N.Y. — Slipped getting on truck—inj. leg	481.58
Renee Guignard, Glenfield, N.Y. — Auto accident—eye, head, inj.	645.16
John A. Ogden, Hamilton, N.Y. — Hit by tree—broke collarbone	120.00
Minnie Jacobs, Hilton, N.Y. — Fell over cutter—broke hip	711.77
Davis W. Vokins, Jr., St. Johnsville, N.Y. — Playing kickball—broke fingers	158.56
Floyd VanEtten, Ransomville, N.Y. — Crushed by cow—injured sternum	240.00
Wayne Lampman, Boonville, N.Y. — Dragged by bull—cut finger	$107.14
Gordon Ireland, Marietta, N.Y. — Kicked by cow—inj. leg	700.60
Floyd Hamilton, Jamesville, N.Y. — Hit hole driving tractor—broke arm	1568.24
Raymond Rath, Stanley, N.Y. — Hit by bale of hay—broke knee	199.99
Thomas Richter, Sandy Creek, N.Y. — Brake released on tractor—broke leg	231.42
Elmer L. Dox, Winthrop, N.Y. — Caught in silo unloader—inj. fingers	202.86
James M. Goldie, Lisbon, N.Y. — Fell from horse—broke wrist	124.29
Wesley A. Martin, Scotia, N.Y. — Auto accident—inj. knee	318.69
James Wessig, Waterloo, N.Y. — Kicked by horse—broke rib	287.54
Frank J. Anioloski, Kanona, N.Y. — Tree fell on leg—broke ankle	2275.36
Wesley A. Gosper, Addison, N.Y. — Kicked by cow—injured knee	172.85
Robert Turner, Sr., Hornell, N.Y. — Gored by bull—broke arm	218.55
Clarence Walker, Prattsburg, N.Y. — Auto accident—cut face	367.70
Rachel K. Walter, Lock Sheldrake, N.Y. — Auto accident—inj. elbow, whiplash	390.35
Charlotte Benkeley, Owego, N.Y. — Stepped in hole—broke ankle	441.14
Frank M. Bush, Accord, N.Y. — Using saw—cut thumb	130.64
Ralph C. Juckett, Whitehall, N.Y. — Knocked down by cow—broke arm	308.56
Duane G. Ingison, Sodus, N.Y. — Fell from ladder—mult. injuries	397.18
Thomas J. Conrad, North Java, N.Y. — Auto acc.—broke leg, glass in forehead	844.71
Bradley Pepper, Canton, Pa. — Horse reared—broke pelvis	128.30
Walter S. Cole, Jr., Columbia Cross Roads, Pa. — Kicked by cow—broke ribs	171.40
Dale Johnson, Corry, Pa. — Horse went thru fence—cut foot	464.89
Mahlon G. Collum, Uniondale, Pa. — Hit by tree limb—inj. chest	345.42
Sophie Desautelle, Princeton, N.J. — Spilled hot grease—burned legs	334.27
Nellie Kavaliunas, Clarksboro, N.J. — Kicked by cow—sprained ankle	203.00
Lester S. Smith, Livermore Falls, Me. — Struck by cow—broke ribs	200.00
Herbert Perkins, Lyme Center, N.H. — Pedestrian acc.—broke leg	170.00
Edward C. Austin, Jr., Bennington, Vt. — Caught in fan—inj. fingers	341.13
T. Elizabeth Maxham, Woodstock, Vt. — Fell from porch—broke arm	176.15
Gladys Hapgood, Essex Junction, Vt. — Auto acc.—broke hip	630.00

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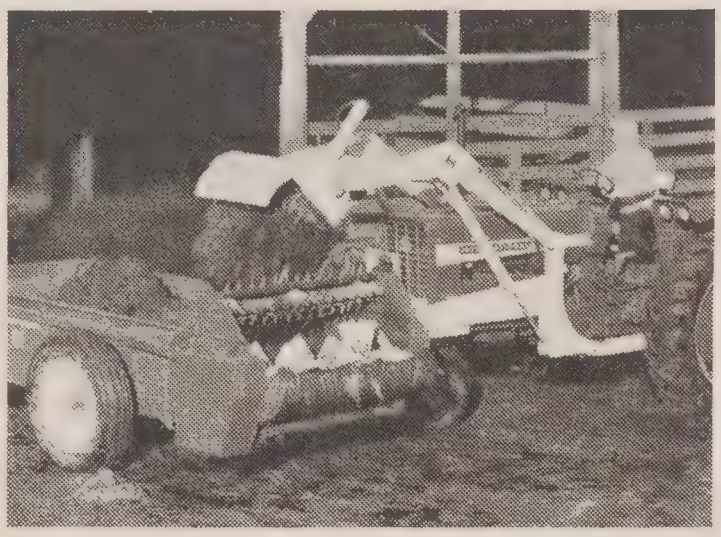

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For The Northeast Farmer

NOVEMBER 1969

American Agriculturist
and the
RURAL NEW YORKER

The cows are having a "moo-in," demanding more silage from the Establishment . . . Paul Miller in this case. Photo: Raymond Pestle.

DAIRYMAN OF THE YEAR

EVERY year, the New England Green Pastures Committee selects a "dairyman of the year" in each of the six states of the region. Paul Miller of Vernon, third generation owner of the Miller Farm, was chosen as the "1969 Vermont Dairyman of the Year." This is the first time a Windham County farm family has received this recognition, although many years ago the Harlow Brothers of Westminster were state winners in the Green Pastures roughage program.

Paul and Mary Miller purchased the 330-acre unit in 1962 from his parents, Mr. and Mrs. J. Maynard Miller. From the grade herd of 73 cows, the herd has been built up to 100 cows with 70 heifers and 12 bulls . . . all registered Holstein-Friesians. While milk is the main product sold, the owners have found a good demand for dairy bulls and raise several for sale to other dairymen. In 1968, this three-man operation produced and sold 1,331,384 pounds of milk from a milking herd of 85.5 cows. The herd averaged 15,572 pounds of milk per cow. That's mighty high on the production ladder, but the owner's goal is higher yet . . . 18,000 or more.

Use Records

Records of all kinds . . . DHIA, ELFAC, breeding, crops and soils . . . reveal which practices pay, and those that do not. As innovators, the Millers have few equals. Both are college graduates, Mary a registered nurse and Paul a biology major. Mrs. Miller keeps many of the records, but both use them.

The "outside" work force includes Paul's father, plus hired man Clyde Covey. Maynard does most of the milking, and also works some on the crops. Clyde and Paul do most of the crops work. Paul breeds his own cows and has had the herd type-classified four times to improve body characteristics.

In 1969, 88 acres of corn were grown . . . mainly for silage, but a few acres were picked and fed as high-moisture corn. The hay is largely alfalfa, used for hay and haylage. In the future, Paul would like to put up haylage enough to feed (with corn silage) year 'round.

Community Activities

One might think that a busy farm life would subtract from the community activities of this family! Not so here.

Maynard set the pattern for his son by serving as a Vernon selectman for years (and still is), as well as being a leader in farm credit and milk marketing organizations. Paul was town lister for five years, a trustee of Vermont Dairy Herd Improvement Association six years (president for three), currently is a trustee of the Farm Bureau of Massachusetts and Windham County Farm Bureau, and an elder of the Seventh Day Adventist Church.

Mary teaches home nursing courses, is Vernon Community Chest chairman and a trustee of 4-H Camp Waubanong. Completing the family circle are a daughter and two sons, ranging in age from four months to seven years.

Editor's note: Thanks to Windham County Agent Ray Pestle and University of Vermont Associate Editor Tom McCormick for providing information and picture for this article.

Our 70th birthday party is 6 weeks long!

(help us celebrate and you'll receive a gift from us.)

We're celebrating the invention of the world's first mechanical manure spreader. A New Idea, back in 1899. So, if you buy one of our new ones between October 15 and November 30, 1969 — we'll send your family a birthday present.
45-piece Harvest pattern dinnerware set by Anchor Hocking. Oven quality — with the look of fine china. Soft, translucent and delicate. Place settings for eight: dinner plates, soup/salad bowls, cups and saucers, desserts, vegetable bowl, platter, sugar and creamer.
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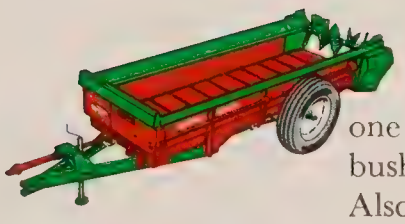

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For The Northeast Farmer

American Agriculturist and the RURAL NEW YORKER

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OUR COVER

Carl Abraham of Macedon, New York, amidst the symbols of abundant harvest. Photo: Mrs. Doris G. Barker.

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workhorse power

and racehorse go.

carefree 25 hp engines for chores, for kicks Evinrude introduces four snowmobile models for 1970. Three deluxe Skeeters and the sporty Bobcat. And they're all sporting Evinrude's 25 horsepower, twin-cylinder engine. They're built powerful, built reliable so you can get them to pay for their keep. These big displacement 437 cc engines don't strain when pulling loads. And Evinrude's unique *torque-sensing drive* automatically responds to loads and hills. See your nearest Evinrude snowmobile dealer. For chores. Or just for kicks.

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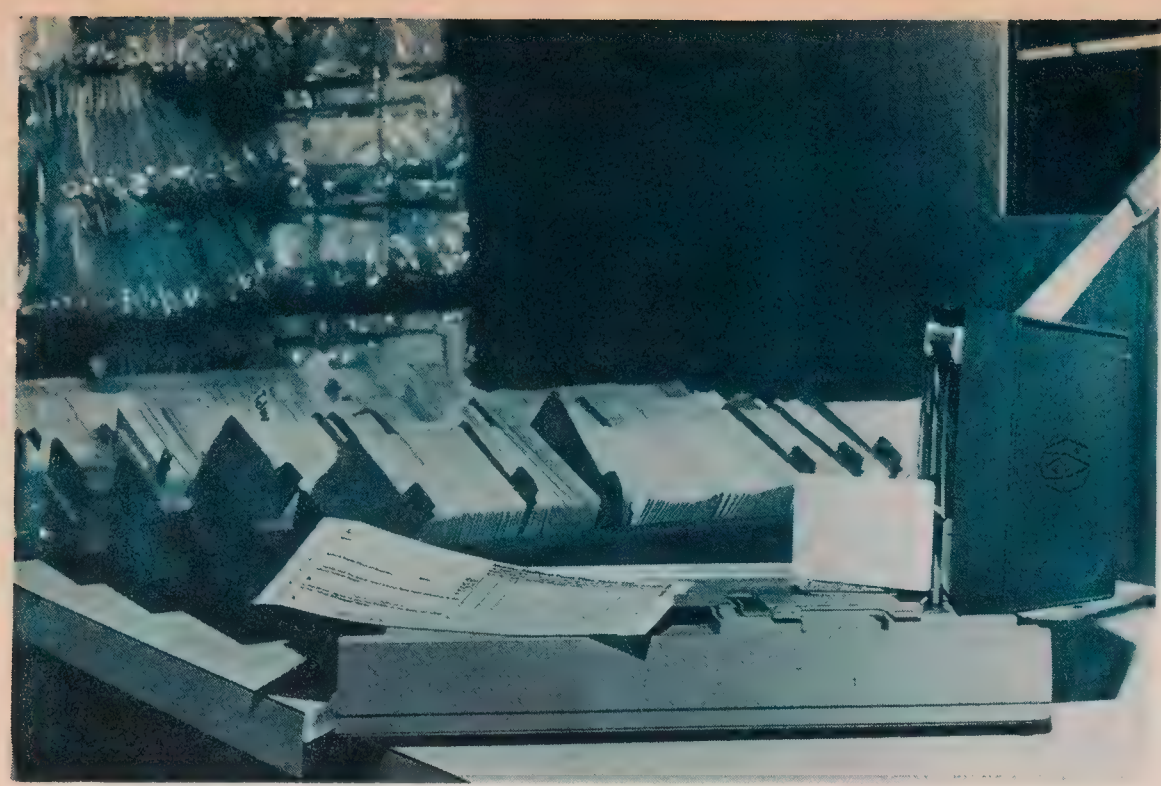

Shown here is a typical imprinter used by dealers . . . along with the blue plastic cards that include names and account numbers of farmers signed with the dealer.

FARM CREDIT CARD

by James Albright

THE era of the self-supporting farmer who produced everything he needed and possibly made some extra money by selling what he didn't need is, of course, a memory in Granddad's mind. Today's farm is a business completely dependent upon innumerable outside inputs to produce and distribute its vital products . . . the ultimate goal being the development of a suitable income for the farmer.

Since farming is a business, it, like all businesses, must deal with money . . . including that much-feared technique of going into the money market and obtaining credit.

Remained Same

With all the changes that have evolved on the farm, one thing has remained pretty much the same as it was in the era of the self-supporting farmer, and that is the farmer's money dealings with his feed and equipment dealers when buying feed, seeds, fertilizer, etc.

Traditionally, dealers send farmers bills, and if a farmer pays within a certain number of days, he gets a discount. This discount, however, has been scrapped recently by many dealers . . . thanks to the complex regulations concerning it that are included in the new Truth-in-Lending law.

In some cases, inability of the farmer to pay immediately simply means the dealer ends up carrying the farmer on his books without any interest charges. Often the dealer allows the farmer to continue to add to his bill. More often than not, the dealer has one policy for one farmer and a different policy for another farmer. Ulcer-producing situations are not uncommon.

William Currie, manager of the Pomfret C. & E. Cooperative, likes the Marine Midland Farm Plan.

One solution to the problem is the Marine Midland Farm Plan. This is a program developed by Marine Midland Banks, Inc. to shift the farmer/dealer credit function to a more business-like operation.

This new credit service is available to feed and farm supply stores and dealers, and to other types of stores, dealers, firms and individuals furnishing production inputs and services to farmers.

Briefly, the Marine Midland Farm Plan works as follows: The dealer furnishes the bank with a list of his customers and works with the bank to establish a credit rating for each one. Basing its decision on the manner the farmer pays his bills, the bank approves or disapproves each . . . normally, about 95 percent are approved.

Each farmer is then visited or sent a letter. The program is explained to him. Each is requested to sign and return a Retail Installment Credit Application and Agreement. This agreement authorizes Marine Midland to purchase credit sales slips from the dealer. And by signing these agreements, the farmer agrees to pay the bank directly. All farmers who do not want to sign, or whose credit rating prevents their joining the program, are normally left on a cash basis.

Whenever a participating farmer wishes to acquire a farm-production item, say feed or seed, he need only call his dealer and tell him what and how much he wants. The dealer simply removes the farmer's card and fills out and imprints a credit sales slip. Once a farmer has signed a Retail Installment Credit Application and Agreement, he doesn't have to sign anything else, including the credit sales slip. The farmer, therefore, need not even be present for delivery after a phone order.

Dealer Paid

Almost every business day, the dealer, as part of his normal duties, submits to the bank involved all the credit sales slips developed since his last deposit. The dealer's checking account is credited for the amount of the sales slips, less a small discount, and plus whatever percentage discount has been allowed the farmer for prompt payment . . . usually the latter is about 2 percent. The bank can maintain the discount (whereas many dealers are being forced to give it up) because the bank's computerized billing makes it possible to compute the Annual Percentage Rate and other terms required by Truth-in-Lending.

The bank bills the farmer once a month. If he pays within 15 days after billing, the bank allows a 2 percent discount. If the bill is not paid within 15 days but within 30 days, the farmer loses the discount, but does not have any credit service charge. Thereafter, the farmer will be charged 1 percent a month in advance. In other words, one month after the first billing, if the farmer has not paid, he will be billed again with 1 percent of the unpaid amount added to the bill.

If a farmer decides to use the revolving credit portion of the plan, all his payments will be applied to the oldest portion of his bill first and the prompt payment discount is eliminated. This discount can only be earned if the entire bill is paid . . . and only for that portion of the bill acquired within the previous billing period.

Large Items

The farmer often has the option of making seasonal or large-item purchases such as fertilizer, seed, chemicals, etc., in a slightly different way via a special Extended Payments Account. Use of this account requires the bank's permission. In this manner, the farmer can keep his monthly accounts paid up and can continue to obtain cash discounts while the seasonal or large-item purchases are paid for in monthly payments or at market time, depending on when the farmer receives his income.

How has the program worked? According to Ralph L. Higley, vice president, Marine Midland Banks, Inc., "The program, despite a large amount of dealer interest, was slow to get off the ground.

"Now, however, it's really moving and currently seven out of twelve Marine Midland banks affiliated with the Marine Midland holding company here in Buffalo are offering the program. There are already well over 30 dealers in the program."

As far as Mr. Higley knows, only one other bank (in Ohio) has any kind of program similar to Marine Midland's Farm Plan. The Ohio bank obtained their information from Marine Midland and has only a few dealers on the program so far.

First Store

The first store to go on the program was the Conewango Valley Mills, Inc., in Conewango Valley, New York. It went on the plan two years ago under the auspices of the Marine Midland Chautauqua National Bank in Jamestown with G. Rex Stratton, assistant vice president of this bank, the motivating force behind what was then a pilot program.

After two years, here is what the owner of this mill, Howard Carver thinks, "If Marine Midland ever abandoned this plan, I would either require everyone to pay cash or else sell out completely. Never again will I go back into the credit business. As things are now, the bank is doing what it knows best . . . financing . . . and I'm doing what I know best, selling feed and seed. It's worked wonders with my outlook on life!"

Cooperative

Another store which pioneered with this program was Pomfret C. & E. Cooperative, owned by 700 farmers and located in Fredonia, New York. William Currie, manager of the Agway-affiliated store, comments, "The girls in the office can now concentrate on other things besides billing, collecting, etc. Ordering, shipping and other important functions can now be stressed. Our customers have certainly benefited from this as well as business. The availability of cash alone is going to allow us to expand in the near future."

Besides immediate cash and increased efficiency, the program has other advantages for dealers. It leaves debt collection to Marine Midland with credit losses being the bank's responsibility, as long as the dealer follows all mandated procedures during the sale. Further, it is almost entirely the bank's job to worry about Truth-in-Lending regulations.

For the farmer it means he continues to get his normal cash discount . . . or begins to get one where he didn't before. Through prompt payment, he establishes a credit rating much needed in these times. He receives better and more efficient service from his dealer and through his additional contacts with the bank is better able to utilize the financial expertise of the bank. Last but certainly not least, lower dealer costs can result in lower prices or larger patronage refunds.

"Yes, the program is really moving," says Mr. Higley. "And why not? Except for fires, the old system probably put more feed dealers out of business than any other reason. Nobody benefited from that!"

Doc Mettler Comments On:

BOVINE FOUNDER

MUCH as anyone dislikes seeing the final killing frost come it would be a problem if it didn't. Can you imagine how big some of the vines and weeds on the fences along the roadways would get if they didn't get frozen back once a year? Nature seems to take care of its own pruning quite well if left alone.

The hoof of the cow is dependent on nature's pruning, too, being trimmed back by natural wear. When man interferes with nature too much and wear is not allowed to take place the hoof of the cow gets so long that the animal becomes lame and the hoof has to be trimmed back with tools.

Misshapen

Poor conformation, injury and disease can cause the hoof to become misshapen even if the animal gets plenty of exercise. One disease that causes deformed hooves in cattle is laminitis, or founder. Founder in the horse is well known, but many people who have been around cattle all their lives have never seen a case of bovine founder.

Last month we discussed the anatomy and physiology of the hoof of the horse. The hoof of the cow is similar in some respects, but fantastically different in others. The cow is walking on the tip of her second and third digit and has, of course, a cloven hoof. There is nothing in the cow's hoof to compare with the horse's frog. Smaller ruminants such as sheep, goats and deer have soft frog-like pads on their feet to enable them to run on the rocks of their native range. Cows don't have this soft rough pad and are better off in a soft stone-free area than on rocks. Leave out the bar and the frog, divide the hoof in two parts and there isn't too much difference in the hoof of the horse and cow.

When a cow has had an acute case of laminitis or founder her foot just grows longer and canoe-shaped instead of wearing down normally. She puts her weight back on her heels and as time goes on appears flat footed. As one veterinarian put it, "Once you've seen a foundered cow walk you'll never miss another one."

Many things can bring on founder. As in the horse, the blocky, chunky type cow seems most predisposed to founder, but even a sharp, finely-boned dairy animal can come down with it. Most of the founder I have seen is the after-effect of shipping fever or stress caused by an infected retained placenta or other fever-producing disease. Veterinarians who work with feeder cattle tell me that over-feeding or bringing them onto feed too quickly after shipping can founder a steer or heifer quicker than one might expect. Correcting the cause as soon as possible, or better yet not allowing the cause to happen at all, is the best way to prevent founder.

If you discover an animal with any condition from over-feeding to retained placenta becoming stiff and not wanting to move, check her feet. If they feel hot to touch, mention this to your veterinarian. He will use corticosteroids, antihistamines, and a variety of drugs to correct the cause before founder becomes chronic. Standing a cow with acute founder in cold water is probably just as important in cattle as in horses, but is more difficult to do.

Animals that have founder can be helped by a diet containing enough vitamins and a correct balance of minerals. Routine hoof trimming to keep the foot as near normal shape as possible is important. However, no matter how well you take care of an individual animal it can never be the same once founder occurs. Early treatment of disease and careful feeding can prevent founder as well as many other after effects of poor handling. This is just one more reason why – "When in doubt, call your veterinarian."

"No, a truck didn't hit it. My father got his tax bill this morning!"

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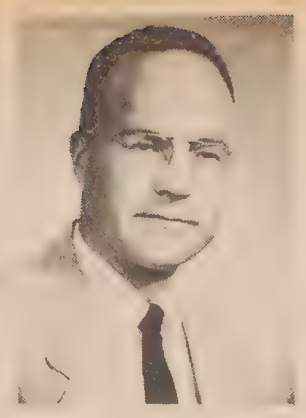

by GORDON CONKLIN

NEVER SOUND RETREAT

I visited with a young dairyman the other day, sharing experiences and information about the business of farming.

After a time, I asked about his family . . . and I learned that his wife, at the age of 34, is in the advanced stages of multiple sclerosis. Their three children carry most of the housekeeping load, as well as helping mightily with farm work.

Later, I learned more about the family . . . and my admiration grew. Here is a man who has remained faithful to his wife in sickness, as in health. Here is a family that has learned to pull together amidst trying times . . . their courage tempered, and their compassion deepened, in the crucible of misfortune. And, most touching of all, here is a woman who faces untimely death without bitterness . . . and tries to live each day on the plus side of the line between the positive and the negative.

There must be bad times, of course, when some of the members of this family are tempted to curse the day they were born . . . even as you and me, my friend, if we have been long upon this troubled earth. And it would be dishonest to portray them as consistent angels who do no wrong . . . for they too are made of human clay.

But the dissidents who would tear down the fabric of a society they call "rotten" have apparently not perceived the nobility that surfaces in the lives of ordinary people like those I have mentioned. And the cynic who despairs of the human race could not have known of their unsung heroism in the face of pain and disappointment.

Many of those who walk beside us along the road of life continue to build even after the mortar they mix is wet only by their own tears . . . a gallant band of soldiers who never sound retreat.

REAPING THE HARVEST

There have always been in agricultural circles a certain number of avant-garde theorists who proclaimed that organization can overcome "archaic" forces of supply and demand. Governments can, they argue, set whatever price is beneficial to the producers of a product . . . and then see to it that the price stays that way (or moves higher).

Alas! Governments cannot even enforce a price schedule made sacred by solemnly affixing thereto the signature of government officials!

Specifically, the International Grains Agreement was negotiated during a time when world wheat supplies were relatively short . . . and the alarmists were crying each day that the spectre of famine stalked the whole earth. But by the middle of 1968, when the IGA treaty went into effect, the wheat supply situation had dramatically changed . . . world wheat prices were already below IGA minimums.

It got to the point where hardly any wheat in the world was actually moving at price levels agreed upon in the IGA. Furthermore, carryover stocks of this raw material for the Staff of Life had reached **2,000,000,000 bushels** in the five principal producing nations.

The upshot has been that the countries signing the International Grains Agreement have pretty much decided to ignore the whole thing, and sell wheat where they can at the price it will bring. Setting prices by an international cartel is fine . . . but only if the realities of the marketplace are such as to make the deal workable.

The forces of supply and demand may be considered by some to be "archaic" and "irrelevant" . . . similar to the "quaint old adage" about the danger of a driver mixing alcohol and gasoline. Don't forget, though, that monuments will be erected as recently as tomorrow to the memory of drivers . . . and economic agreements . . . that eliminated from all consideration the lessons of the past.

Organizations of farmers can and do influence prices . . . both of items they buy, and those they sell. Farm organizations have at times successfully modified the supply of a farm commodity . . . and have worked to stimulate demand for it.

My point is not one of minimizing the importance of farmers getting together, but rather that organization by itself is no panacea . . . and can be very ineffective indeed without a realistic appraisal of the facts of life concerning the powerful economic forces of supply and demand.

GO-BETWEEN

From time to time, I receive letters from established farmers who have reached an age where they are beginning to think of retirement. They write me asking whether I know of any young person who might be interested in entering into some sort of partnership in their farm business . . . with the eventual objective of purchasing it on a mutually satisfactory arrangement.

American Agriculturist serves in such instances as merely a "go-between," and does not attempt to screen either the farmers or the prospective partners in any way.

Anyone in either category, though, can write to us at:

American Agriculturist
Box 370
Savings Bank Building
Ithaca, NY 14850

and indicate an interest in such an arrangement. We will pass information along to those who have already contacted us.

TAX TROUBLE

Some time ago, I tweaked my New Hampshire friends about their state's unusual attitude toward taxing its citizens . . . being the only one of 50 with neither a general sales tax, nor a conventional state income tax. The letter-writing reaction resembled that of a hornet's nest after a rock has been chucked through it!

As is usually the case, I gather there is more heat than light in the great tax debate of the Granite State. Everybody there has a vested interest in **any** tax change . . . emotional charge and countercharge seem to be the order of the day.

Through all the smoke, though, I think I can still see some of the basic problems remaining as unresolved as ever:

1. Overdependence on real estate taxes as a source of public revenue. Real estate ownership has long since ceased to be an accurate measure of a person's earning capacity.
2. Some of the folks most able to pay taxes are having an especially good deal from present taxing arrangements . . . at the expense of many others far less able to pay.
3. Unrealistic hopes linger for painless revenue from a gimmick like the bobtailed lottery that was designed to shift some of the tax burden to out-of-state bettors.

Now before you grab a piece of paper and proceed to char it with heated comments, let me assure you I am not:

(1) a communist
(2) born out of wedlock
(3) incarcerated in a mental institution
(4) trying to "get" anybody

Sooner or later, New Hampshire will modify its taxing structure . . . and I raise a voice on behalf of moving toward greater equity and realism.

URBANIZED

At the University of Rhode Island, a recent change has been made . . . the College of Agriculture is now the College of Resource Development. New Jersey, some time ago, made a similar shift in name to College of Agriculture and Environmental Science.

James Cobble, dean of the College of Resource Development at URI, points out that the state has become increasingly urban . . . and the research and extension in his shop has been re-oriented with that change in mind. "During the past five to six years," he reports, "more emphasis has been directed toward wildlife management, land use, conservation, pollution, pesticide residues, urban home horticulture, turfgrass management, marine resources, community development, the urban underprivileged, recreation, senior citizens, development of youth leadership through the 4-H program, beautification, and so on . . . more than one would find in the generally-accepted agricultural college programs."

Some agricultural fundamentalists will bewail such a name change as a sure sign of the betrayal of farmers. But colleges are institutions created to serve human needs, and they must adapt constantly to fit changing conditions. Pragmatically, farmers cannot expect to claim for their benefit all the resources of any educational organization, or segment thereof . . . especially in heavily-urbanized states like Rhode Island and New Jersey.

Hopefully, though, college and extension administrators will not succumb entirely to the pressures pushing them away from agriculture. In terms of both people and economics, northeastern agriculture makes an impact far beyond the dimensions of which most folks . . . even farmers . . . are aware.

Jim, let's not shorten the new name of your outfit to its initials, or it would have a negative image with many poultrymen!

HARVEST MOMENTS

Louise Darcy

Harvest moments offer gifts
To be treasured through the year
As I walk beneath gay trees
That are flaming round me here.

Scent of smoke is on the air,
Orange pumpkins ripen now;
Apples for the gathering
Are red globes upon the bough.

On a day of clear, blue sky
When earth yields its fertile dower,
Autumn loveliness is mine,
Fruit of each abundant hour.

Food For The Spirit

by Robert Clingan

MY BROTHER'S KEEPER?

The book of Genesis, or "beginnings," in the Bible has some of the most fascinating accounts of dialogue between God and man in its stories.

Take the old story of the first murder. Here is where all of our violence is reputed to have begun. Cain killed Abel because his gifts of the fruits of the field did not seem as acceptable a sacrifice as Abel's "firstlings" of his flocks and herds. In anger, envy, and dismay, he took his brother's life and hid his body. The story writer tells us that God sought him out calling, "Cain, Cain, where art thou?" When he finally cornered him he asked the revealing question, "Cain, where is thy brother?"

Cain countered with two strategic answers. First, he pled ignorance. "How should I know?" And then he tried to justify his concocted illusion of ignorance by creating a false issue. "Am I my brother's keeper?"

The obvious answer he wanted to receive was, "Of course you are not your brother's keeper. Why should you expect to know? Pardon my asking."

Too many people assume from the story that because God rebuked his professed ignorance and disclosed his crime he also said, "You are your brother's keeper." This is not a true reading of the story . . . but something traditional interpreters of the Bible have added.

God did not intend anyone to be another man's keeper. That is why slavery is wrong; that is why our system of making the American Indian a perpetual ward of the government is wrong; that is why our welfare system is due for drastic changes. No man is meant to be any man's keeper.

This kind of relationship denies all that is truly human. A human being is meant to stand on his own feet and be his own person, declare his own scale of values and the principles to which he is loyal, and which give his life meaning.

It is bad for both the keeper and the kept. The kept man loses his self-respect, his self-identity, his capacity to face up to and assume responsibilities. It makes a man evasive and dishonest, and a source of festering bitterness that can poison the lives of several generations.

It is equally bad for the keeper. He is tempted to become arrogant, proud, cruel, and repressive. He becomes suspicious of anyone or anything that may threaten to reduce his power over the kept. He wants to keep the kept man "in his place," and his place is always at the bottom of a ladder without rungs.

If God had taken Cain's statement seriously he would have said, "Of course you are not your brother's keeper. You are your brother's brother . . . and that makes all the difference in the world."

NOVEMBER

November bears Thanksgiving in its mold;
it signs its benediction on the field
in harvests rich against the winter's cold,
the summer's bounty borne in autumn's yield.
November skies are veiled in gentle gray,
a touch of ripening frost is in the air
to usher in a glad Thanksgiving Day,
its gladness shaped to gratitude and prayer.
The summer days are gone, their richness spent
for stores of grain and boughs of ripened fruit,
November bears the form of deep content
across the fields now eloquently mute
while praises tuned to thankful anthems rise
to touch the rim of calm November skies.

Florence Pedigo Jansson

AGWAY CHANGES

The election of Edmund H. Fallon to the newly-created post of senior vice president and chief administrative officer of Agway Inc., has been announced by Jonathan Davis, president of the cooperative.

Fallon, who has served as executive vice president and general manager of Agway since its formation in 1964, was succeeded by Ronald N. Goddard, previously vice president and assistant general manager. Both assumed their new posts on October 27.

In his new assignment, Fallon will be responsible primarily for outside investments and new corporate projects, and act as liaison with many of Agway's subsidiaries and affiliates in a 12-state area. He will also act as advisor and counselor to the Agway Board and management.

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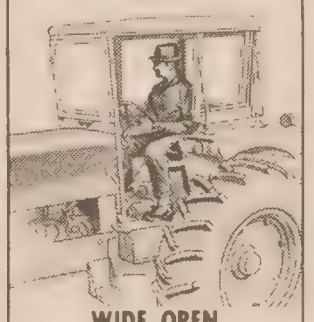

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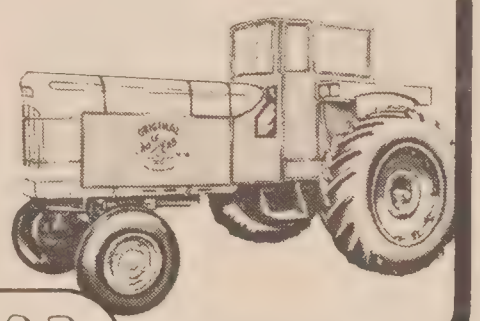

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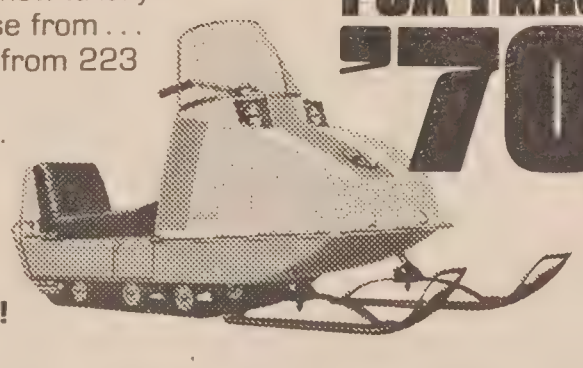

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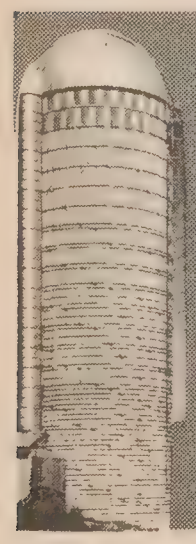

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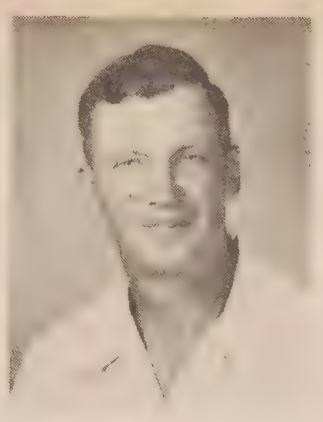

Gayway Farm Notes

by HAROLD HAWLEY

AUGUST-SOWN WHEAT

The winter wheat we sowed in very early August came up and looked fine until about September first. By that time, some nutgrass and pigweed had come up and were taller than the wheat. The pigweed we would have sprayed but the nutgrass was more of a problem. Well, about the third week in September when we had a little time, we ran over the bad parts of the field with the windrower cutting off everything just above the top of the wheat. Whether this will constitute a real control remains to be seen.

It is quite obvious that if we had held off planting for a month, those same weeds would have come up and we could have done a better job on them with the disc than we could possibly do by mowing them.

FRIEND FAR AFIELD

A most ambitious and wonderful attempt to collect the paraphernalia associated with progress in many, many fields is to be found at Harold Warp's Pioneer Village at Minden, Nebraska. Some things he has assembled show the various stages of development in all forms of transportation (i. e., foot, hand car, bicycle, horse-back, oxcart, buggy, surrey, cars of every vintage, railroad equipment, boats, etc., etc.).

Communications is a whole subject with a thrilling section devoted to the Pony Express along with maps, paintings, and literature. It's been a long day since mail here was delivered from an RFD wagon such as he showed. I've never quite understood it, but the plains Indians apparently sent messages long distances with mirrors. Anyway, it's all in this fabulous display of Americana.

Early Kitchens

His collection of early American kitchens of each period is beyond my poor power to describe. Needless to say, any discerning person can learn much about the dress, diet, hunting, cooking, weaving and sewing equipment used at various times by a study of his series of kitchens.

If he missed anything in farm equipment, I was unaware of it. Great horse-drawn headers from Pacific Northwest wheat fields of yesteryear were a revelation. The ten-foot wheels and axle used as logging gear for ox teams were a surprise. How thrilling to find an old five-foot horse mower by Emerson, Brantingham and Co. As a barefoot ten-year-old, I cut my first hay with one of those mowers behind a pair of gentle old bays.

As we entered the building which housed the various kinds of plows, we read a big plaque which told how basic to all civization and society was the plow and the man who held it. The plow was described as the very foundation of all man's progress. Credit was given to the author . . . **E. R. Eastman**! It was like meeting an old friend far from home to see his material and name on that wall. Also how fitting and appropriate that his well chosen words should greet each person who entered that building.

SOLID FOUNDATIONS

In the next few weeks, various groups and organizations will be holding their annual meetings and making policy. Obviously, only a small percentage of the membership can or will attend. Delegates will do the voting and make the policy.

This procedure is fine, provided the membership has had an opportunity to review the proposed resolutions and has sent their delegates either instructed or at least aware of the sentiment of those they represent.

The higher the percentage of the membership participating in this all-important process, the better the policy will reflect member opinion and the greater the support those policies will receive.

Few greater tragedies occur than when, after the will of the majority has been expressed through the organization's policy-making procedures, someone who either did not take part . . . or did not agree . . . takes it on himself to see his legislator to tell it as he sees it.

Minority Rule

Legislators cannot always be sure whether someone is speaking for himself or for a group. Sometimes the noise from a very small minority enables a legislator to ignore the wishes of the majority if, for some reason, he does not agree with the majority.

It's a sad fact that not all persons can . . . or will . . . learn the discipline that should be a part of belonging to an organization. Loyalty to the majority opinion is a must if we are to

(Continued on next page)

have effective policy. The chance to make one's individual convictions register comes in the discussion before the vote . . . and when he votes . . . and then again next policy-making time if necessary. In between, his friends and neighbors and fellow members are entitled to his support on a policy which has passed, even if he does not personally favor it.

We have made much progress in these matters. However, it still happens that an unhappy member of the minority fights his battle after the whistle. He appeals in the press, to his legislators, and wherever else he thinks he can be effective. No group can afford divisiveness, particularly in agriculture where we have no overwhelming legislative advantage.

To step up the loyalty quotient, every effort should be made to get a high percentage of the membership to participate in the policy-making procedure. This is the foundation and it must be well built.

MOVING ROUGHAGE

Our roughage consists of haylage and corn silage, and we move ground high-moisture ear corn along with the roughage. Our first equipment was a narrow conveyor to move feed from the silo into the barn. From there it moved by auger to the feeding auger which distributed it along the manger.

We had two problems. The narrow single-chain conveyor just did not have enough capacity. In addition, when high moisture corn was being fed, the chain and flights had a habit of riding over the feed. When the feed reached the auger, it usually moved along pretty well. The exceptions occurred when only haylage was being fed. Sometimes it would stick to the bottom of the tube and the flights would bounce along on top of it, eventually bending back the edge of the flights.

To correct these problems we put in regular conveyors . . . two chain affairs about 20 inches wide. This gave all the capacity we want or need. The only complaint on the conveyors is that they are a little noisy, but this isn't serious. Certainly they will outlast the augers, which soon deteriorated once the flight edges bent back.

To distribute the feed in the bunk or manger we use a conveyor with a slot on the bottom. The slot gets wider as the feed moves along and more of it falls through. We have not yet been able to feed uniformly the whole length of the barn with this device but possibly well enough for practical purposes. It looks as though the life of this equipment should be fairly satisfactory.

These feeders are priced to be competitive with augers. The price is, therefore, higher than we think it should be but we do think the equipment is good. We understand that some who have built the feeders for themselves have cut the cost pretty substantially, even after figuring the value of their time.

HAY PELLETING

A few years ago we reported seeing large stationary commercial set-ups which converted direct-cut alfalfa into alfalfa pellets.

This year we talked to the operators of pick-up hay pelleters who were doing business in an irrigated valley in Wyoming. We were pretty disappointed in that the equipment does not seem likely to be practical here unless modified considerably. What a boon if hay for sale could be pelleted. Trucking and handling costs would be greatly reduced.

The practice is to windrow alfalfa and leave it for about a week. In a no-rain-low-humidity climate this means the hay gets real dry. A little moisture is added as the hay goes through the machine. It comes out as pellets. They are elevated into a trailing wagon just as we do with ear corn.

The kind of weather to get hay that dry just doesn't happen here. I couldn't see why it had to be so dry but they all assured us that to get good pellets this is a must. Also the stand must be pretty pure as grasses do not pellet.

The cost of the rig is high . . . between thirty and thirty-five thousand dollars, depending on the options selected. The capacity was not exciting . . . about four to five tons per hour.

In spite of all these problems, pelleting is a tremendous thing out there and hopefully has a place in the East. Boy, you talk about labor-saving! Haying becomes exactly like grain harvest. Windrow, pellet, and haul away in a truck to be fed or stored. It would beat making haylage if some of the problems that now exist can be solved!

Editors note: Harold Hawley was named as a member of the White House Conference on Food, Nutrition, and Health!

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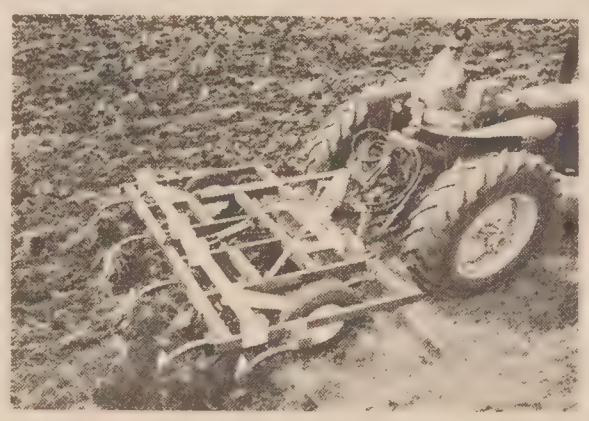

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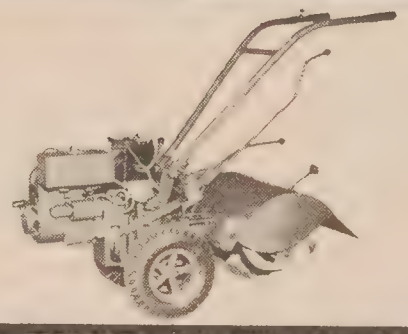

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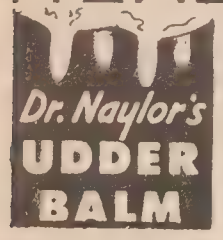

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Personal Farm Experience

ALL HAY

There are 80 milk cows . . . 160 head of cattle in all . . . at the MacLawn Farms operated by Hugh MacLaury and his son, Judson, near Harpersfield, (Delaware County) New York.

An unusual feature of this operation is the use of hay as the only home-grown roughage . . . supplemented by citrus pulp. Both hay and pulp are fed in a Vibra-feeder feed bunk (at separate feedings); hay is also fed free-choice along one end of the barn.

Free Stalls

There are 103 free stalls in the recently-constructed section of the barn, plus a double-4 herringbone milking parlor, and a milkroom with 1000-gallon bulk tank. All grain is fed in the parlor.

Most seedings are made without a nurse crop . . .a practice done off and on since the MacLaurys came here in 1933. No small grains were planted on MacLawn Farms in 1969. In 1968, the MacLaurys put up 20,000 bales of hay . . . and still had to buy some more.

Hugh says, "It would cost us $20,000 to tool up for making and storage silage . . . although we might decide to use a bunker silo someday." No silage has been put up here since 1947.

Animal health for this purebred herd of Holsteins is an important item to the MacLaurys. It starts when the navel of each calf is disinfected with iodine . . . a medication, by the way, used here on the livestock for a variety of swellings and wounds. Calves are fed whole milk for three months before being completely weaned to a ration of grain and hay.

Calves are injected with an "anti-coli-enteritidis-pasteurella serum" immediately after birth . . .and with antibiotics as needed.

Heifers are bred to freshen at 30 to 36 months of age, giving them time to attain the size desired. Before going to pasture, bred heifers have a permanent magnet placed to their rumen; this has almost entirely cured the hardware-disease problem that was once severe at MacLawn Farms. "In fact," Hugh says, "we've found that a high percentage of older cows that are under the weather improve if we put magnets in them."

The udder of each milking cow is infused with penicillin at drying-off time . . . an aid in mastitis prevention. Cows have an exercise lot of two acres, but are not on pasture. *G.L.C.*

Bill Palomaki

80,000 HENS

Every month of the year 5000 pullets (20 weeks old) are delivered to the poultry farm of Bill Palomaki of Spencer, New York. They replace an equal number of the 80,000 birds on the farm. Usually you find a flock of this size in cages, but on this farm all birds are on the floor!

(Continued on next page)

The Song of the Lazy Farmer

As years keep right on rolling by, I think that ev'ryone should try to keep abreast of modern ways and not cling to the good old days. But I don't think this means we should throw out an old idea that's good just 'cause it's something grandpa did 'way back when he was just a kid. For instance, I think it is strange that anyone should want to change the custom of considering that Sunday dinner is, by jing, a real extra-special deal that's not like any other meal . . . a festive time that ought to be the high spot of the week, by gee.

All week the kitchen is my place where I expect to feed my face, but Sunday'd be a day of gloom if we weren't in the dining room. On other days I'd never squeal about oilcloth or stainless steel; on Sunday, though, we never spare the linen and good silverware. This is the day when there should be a whole house full of company with ev'ryone, both host and guest, all decked out in his Sunday best. Adults can visit quietly because the kids eat sep'rately, and not a woman says a thing about the fact she's dieting.

"We expanded before cages became common," Bill explained. "We could convert to cages, but it would take a big investment. I might do it on borrowed money, but I think there are better ways to invest my own cash. Anyway," he added, "because of the odor we are too near the village to keep hens in cages."

Bill has been a poultryman all of his life. "Back in 1924," he said, "my Dad kept a few hundred hens. By the late 1930's he had 5000. He came to this farm in 1936; he and I became partners in 1945 when we had a flock of 10,000."

His father retired seven years ago, spends winters in Florida, but takes an interest in the business in the summer.

When they arrive, the pullets are started on an all-mash ration with 19 percent protein, which is soon dropped to 16 percent. In five weeks most of them are producing eggs at a 50 percent rate, and some eventually may go as high as 90 percent.

"Different lots vary," said Bill, "and no one seems to know exactly why. Some have higher mortality, and never produce as well as other lots."

No culling is done. "Labor is too costly," Bill explained. "After 15 to 16 months of production they are moved out for a few cents a pound."

Eggs are gathered by hand twice a day. They are graded, packed in cartons, and stored in a cooler until sold. Unless you've seen this on a similar setup you can have little idea of the space needed for 80,000 hens . . . or the equipment needed to grade and pack the eggs!

These are my figures, but at 75 percent production, I figure that 5000 dozen eggs go through the plant each day. That's a far cry from the old farm flock of 500 hens!

Marketing is a major part of the business. From 12 to 15 people work on the farm, about half in production and half in washing, grading and packing. Eggs are delivered by Bill's trucks to stores within a radius of 100 miles.

"Up to three years ago," said Bill, "we shipped some eggs to New York. However, by developing local markets, we were able to cut down on long hauls."
— *H.L.C.*

ROOM TO EXPAND

Walter Kiehn of Munnsville, New York, has 3 sons to help operate his 400-acre dairy farm. Ervin, who is a partner, is the oldest; Ernie (16) is still in school but anxious to put full time on the farm; and Homer is 12.

I found Walter and Ernie cutting and raking hay. "We are chopping it for bedding," Walter hastened to explain. "We already have all the hay we need, and we figured we might run short of bedding. Some years back, we sold 10,000 bales of second-cutting and 20,000 bales of first cutting."

To provide a living for two families (Ervin is married) . . . and perhaps four families eventually . . . an addition to the barn is being planned to house 95 animals. It will be a one-story building, as enough hay storage is already available.

The herd at present is around 95 milkers and will be increased to around 150, but the new addition will also house young stock.

"We have plenty of land to grow the feed for the cows," Walter observed. "In fact, we now have 100 acres in improved pasture because we don't need it for crops. It is good, level corn ground. With the exception of 20 acres of woods, the entire farm is tillable; and, incidentally, it has all been tiled." Corn acreage is 75, and oats 30.

The Kiehn's own their own grinder and mix corn-on-the-cob, oats, and dried brewers' grain for the cows.

Woodchucks

After I had talked at some length with Walter, he called to Ervin, who was running a self-propelled hay windrower. As he approached, I noticed a cartridge belt and holster carrying a "six shooter." "Woodchucks?" I asked. "Yes," was the reply. "We have plenty . . . but woodchucks will never be exterminated," he added. "He has a permit to own it," his dad explained.

As I started for the car, I noticed a sizable woodchuck hole that could have caused a broken leg in the old days of horse farming, and which could conceivably throw a man from the tractor seat.

There is plenty of work on the Kiehn farm, but remembering that all work and no play is bad, I asked Walter what they did for fun. "Well," he answered, "I like to hunt and fish."

So I left a beautiful, neat farm, well managed, and obviously enjoyed by its owners. —
Hugh Cosline

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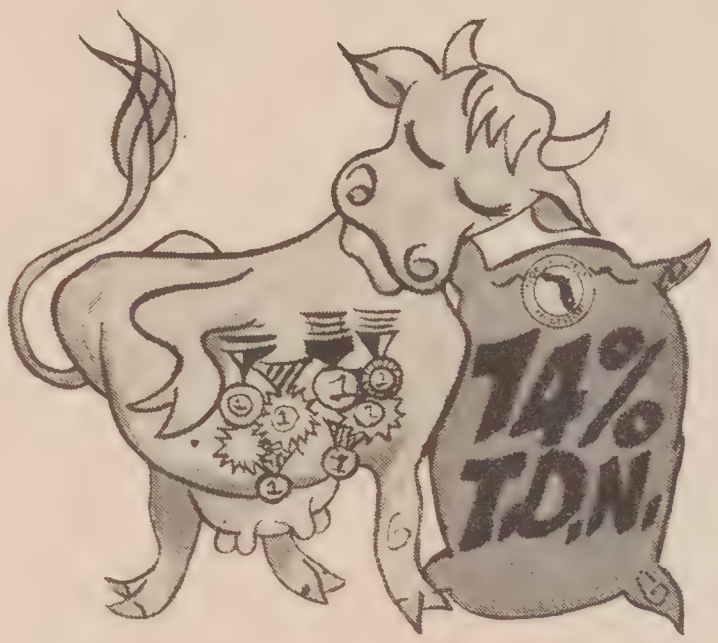

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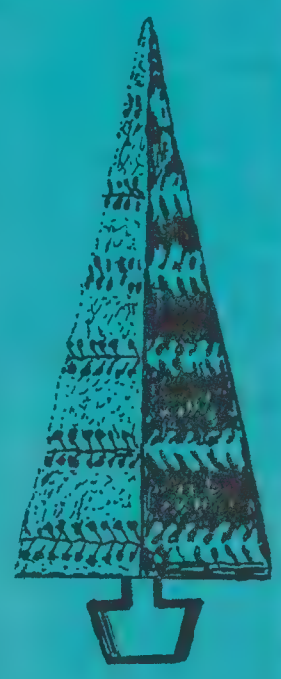

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American Agriculturist invites you to come with us next February and enjoy all the pleasures of a delightful vacation in the lands of eternal summer. Our ship will be the luxurious **Raffaello** of the Italian Line, and she has everything you could possibly want on a cruise ship . . . air conditioning throughout, six swimming pools, smart and spacious staterooms, marvelous food, beautiful lounges, and broad, sunny decks.

Life on shipboard is fun, with plenty of entertainment, good company, and a wonderfully relaxing atmosphere. In charge of our party will be our very competent tour directors, the Travel Service Bureau of Needham, Massachusetts, and they will look after us from start to finish.

As an added attraction, we have selected a sailing which can be boarded at New York on February 7 or at Fort Lauderdale, Florida, on February 9. The ship returns to Fort Lauderdale on February 18 and to New York on February 20.

Our February cruise includes stopovers at five of the most fascinating islands in the Caribbean. Our first port of call is **St. Thomas,** best known of the Virgin Islands. Its capital and harbor city, Charlotte Amalie, stretches upward from the sea to beautiful hills overlooking the ocean. Here is a real shopper's paradise! Narrow lanes are lined with delightful shops where you can find all sorts of bargains, duty free.

Martinique is a French island in the West Indies and was discovered by Columbus, possibly as early as 1493. Its capital, Fort de France, is a modern harbor city and truly a crossroads of the Caribbean.

Curacao, capital island of the Dutch West Indies and one of the most cosmopolitan in the Caribbean. Willemstad is a charming town of rainbow-hued buildings, and the city is divided into two sections by the famous Queen Emma pontoon bridge that swings open to let ships pass in and out of the harbor.

Grenada is known as the "Spice Island" and exports much of the world's nutmeg and mace. The capital, St. George's, is considered to be one of the most beautiful harbor cities in the area.

St. Maarten – Here you'll find a contrast of foreign flavors, for flags of both France and the Netherlands fly over this island. So far, it has escaped the excessive commercialism found on some of the other islands, and you'll enjoy its natural loveliness . . . roads meandering through steep, grassy hills, beautiful views of the sea with other islands on the horizon, and little villages nestled in the valleys.

Don't let this perfect winter

(Continued on next page)

Gordon Conklin, Editor
Box 370-T
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Dates to Remember

Nov. 8-15 - 13th Annual Livestock Exposition, Farm Show Building, Harrisburg, Pa.

Nov. 9-14 - Joint Annual Meetings, American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, Sheraton-Cadillac and Statler-Hilton Hotels, Detroit, Mich.

Nov. 10-12 - Annual Meeting New York Farm Bureau, Flagship Hotel, Rochester, N.Y.

Nov. 11-12 - Massachusetts Farm Bureau Federation Annual Meeting, Sheraton Motor Inn, Quincy, Mass.

Nov. 11-13 - 31st Annual New York State Insecticide and Fungicide Conference, Alice Statler Auditorium, Cornell University, Ithaca, N.Y.

Nov. 13-14 - 51st Annual Convention New Jersey Farm Bureau, Sheraton-Deauville Hotel, Atlantic City, N.J.

Nov. 14-22 - Royal Agricultural Winter Fair, Royal Coliseum, Exhibition Park, Toronto, Canada.

Nov. 15 - Eastern A.I. Cooperative Annual Delegates Meeting, Ithaca, N.Y.

Nov. 19-20 - Connecticut Farm Bureau Annual Meeting, Holiday Inn, Meriden, Conn.

Nov. 20-22 - Campground Owners Conference, Morrison Hall and James Law Auditorium, Cornell University, Ithaca, N.Y.

Nov. 22 - New York Hereford Association Annual Meeting, Trenholm East, near Victor, N.Y.

Nov. 25-26 - Inter-State Milk Producers' Cooperative Annual Meeting, Benjamin Franklin Hotel, Philadelphia, Pa.

Nov. 29-Dec. 7 - International Livestock Show, Chicago, Ill.

Nov. 30-Dec. 6 - 4-H Club Congress, Chicago, Ill.

Dec. 3-5 - National Potato Council Annual Meeting, Commodore Hotel, New York, N.Y.

Dec. 3-6 - Fourth General Assembly InterAmerican Cattlemen's Confederation, San Antonio, Texas.

Dec. 5-6 - National Onion Association Annual Meeting, Sherman House, Chicago, Ill.

Dec. 6 - New York Hereford Association Annual Heifer Sale, Finger Lakes Livestock Market, Canandaigua, N. Y.

Dec. 7-11 - National Junior Horticultural Association 35th Annual Convention, Hotel Sheraton Lincoln, Indianapolis, Ind.

Dec. 13 - Annual Meeting New York Shorthorn Association, Canandaigua Inn, Canandaigua, N.Y.

Dec. 17 - Pennsylvania Milk Marketing Development Referendum.

Give Yourself A Treat . . . . .

(Continued from page 12)

vacation pass you by. We urge you to fill out the coupon on this page and mail it today. We'll send you the day-by-day itinerary and full information about costs. As with all American Agriculturist tours, everything is included in the ticket price, so there are no travel worries of any kind. It's really the ideal way to travel.

Two Other Vacations

Last month we told you about our **South Pacific Paradise Holiday** from March 19 to April 24. This marvelous vacation will take us to Tahiti, New Zealand, Fiji, Samoa, Hawaii, and we'll have two full weeks on the Island Continent of Australia. This is truly a once-in-a-lifetime experience, and we hope you'll decide to go with us.

Then in January, we will spend almost three weeks (January 11-30) in our great Southwest. We will see the most fascinating places in San Francisco, travel the famous Seventeen Mile Drive and Coast Mission Trail with stops at Hearst Castle and Solvang, then go on to Death Valley, Las Vegas, Hoover Dam, Grand Canyon, and Phoenix.

Coming back into California, we visit beautiful San Diego and all the interesting places near Los Angeles – Hollywood and Beverly Hills, Disneyland, Knott's Berry Farm, Farmers' Market, and many others too numerous to mention. Whichever one of these winter vacations you choose, you'll have the time of your life and always be glad you traveled with American Agriculturist.

Also, if you act at once, you can still join us at the beautiful Lake Mohonk Mountain House in New Paltz, New York, for our **Get Acquainted and Reunion Mixer Weekend**, November 21 to 23. You'll meet old friends and make new ones; you'll visit the Hyde Park estates of Roosevelt and Vanderbilt; you'll see travel films and slides and get advance information on our 1970 tour program – in short, you'll have a wonderful weekend, and the cost is just $69.00 per person. Make your reservation today!

The winter meeting of the roundworm cycle is now in session. Right in your own barn.

Roundworms. These parasites drain off essential blood nutrients, slow growth and lower milk production. Research shows that they can cut ability of cattle to digest essential dry matter by as much as 53%. And unless you stop this parasitic growth now, your cows can infect pasture land and renew the roundworm cycle.

Replacement animals suffer, too. Growth is slowed. Breeding size is delayed, and the damage turns up later in your herd replacement costs.

How can you break the roundworm cycle? Worm your cows now, with Agway Wormerpels. Often, a single treatment is all that's necessary. Containing the safest worming agent available, Thibenzole,® Agway Wormerpels are completely tasteless, so they won't turn animals off feed.

Your Agway man can give you complete feeding directions. Talk to him now and break the roundworm cycle.

Warning: Milk taken from treated animals within 96 hours (8 milkings) after the latest treatment must not be used for food. Do not treat within three days of slaughter.

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Agway

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If you demand more strength in a farm loader, our extra-rugged Ford 727 on a Blue-Key Ford 5000 must rank as top choice. Get up to 3,300 lbs breakaway force; lift as much as 1,900 lbs. The 727 loader is also available for Blue-Key Ford 4000 tractors.

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The 1200 loader gives you rugged strength and big capacity at low cost.

Want added strength in a farm loader? The Ford 727 on a Blue-Key Ford 4000 or 5000 tractor is for you.

Big Blue spreaders from Ford. Brute strength plus corrosion resistance for extra long life.

405-cu. ft Big Blue forage wagon is ideal for silo filling, bunk feeding and other hauling jobs.

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NEW JERSEY FARM NEWS

by Amos Kirby
New Jersey Editor

TO Garden State growers taking a look at what may be ahead in 1970, it appears that the shortage of farm workers will continue as the number one problem.

The labor picture is changing. A decline in the number of workers from Puerto Rico resulted in the loss of an estimated 5,000 acres of asparagus in New Jersey and Delaware this season, and growers are ready to swing to mechanical harvesters to cut some 30,000 acres in the two states next year.

A major problem is the lack of equipment to assemble the asparagus spears in some order that will be acceptable to processors. Also needed is a new system of grading and pricing that will be agreeable to growers and packers.

Delaware is nearer a solution than New Jersey. Much of Delaware's acreage is on land owned by the processors, and their experience indicates that machines **can** do the job.

This year, for the first time, more than 100 Mexican-Americans came in to work in the sugarbeet fields. Many planned to stay for the tomato harvest, but left after a week of steady rain . . . something they had rarely, if ever, experienced.

Bright Spot

The one bright spot in the labor picture was an increase in the number of "commuter" workers from Philadelphia, Atlantic City and other communities. However, few are available until the end of the school term. Also, much of the asparagus crop is harvested in the early morning, and city commuters can rarely get to the fields that early.

For the late June — early September crops, commuters have been highly satisfactory. They don't like to work on farms in cool weather, though, when apple and sweet potato crops are harvested.

There is some sentiment toward launching a move to again bring in Jamaicans, now barred under federal regulations. They have been excellent workers in the past.

However, under a reverse wage scale established by federal agencies, this would call for a wage rate to Jamaicans of $1.71 an hour . . . 16 cents above the Puerto Rican rate for 1969 and 21 cents per hour above New Jersey's legal rate.

If the move to bring in Jamaicans gains headway, the $1.71 could be the rate asked by the Puerto Rican government in its 1970 bargaining.

People from far and wide gathered recently at the Red Bank Battle Monument near National Park, New Jersey, to honor Amos Kirby for his lifetime of dedicated service to Garden State agriculture. Editor Gordon Conklin, left, adds his congratulations.

CUCUMBER MOSAIC

Aluminum foil has licked cucumber mosaic virus in experiments with squash conducted over the past two years at the South Jersey Research Center. Aluminum foil was spread on the ground before planting the squash.

The reflected light from the foil is so bright that it repels the winged aphids which transmit the virus to the seedling squash plants. The mosaic-free plants grow more rapidly and produce much larger yields than virus-infected plants.

Aluminum foil will be the recommendation for 1970 to growers who are producing squash for commercial and roadside markets.

BEES AND CUCUMBERS

Eastern Shore cucumber growers are placing the honey bee high on their list of "musts" if one is looking for high yields. Tests conducted in 1969 show that one hive of bees per acre has resulted in double the crop of marketable cucumbers. Commercial bee owners charge various fees, but to determine the cost, check the rental against an increase of upwards of 100 or more bushels per acre.

CORN SILAGE

There is now sufficient evidence that corn silage **can** be the only roughage in a cow's ration. This calls for an adjustment in the grain portion of the ration . . . by upgrading the protein content of the concentrates.

Corn silage, plus grass silage or dry hay, still provides a good balance between TDN and protein. Here again adjustments in the grain ration will depend upon the amount of hay or grass silage in the ration.

GOOD FEED

Corncobs may not look very palatable after the corn has been shelled and they lay on the ground for a few weeks, but they do have a value when the corn is fed as silage, or used as cob meal or shelled corn in the ration.

Extension specialists observe that a 100-bushel corn crop harvested as silage has 12,000 pounds of dry matter and 7,900 of TDN. Harvested as ear corn, there are 6,000 pounds of dry matter and 4,800 of TDN. And harvested as shelled corn, there are 5,000 pounds of dry matter and 4,600 of TDN.

BIRDS PER CAGE

New Jersey poultrymen are being asked to take another look at the bird population per cage . . . the object to focus attention on feed wastage.

Poultry specialists point out that with one bird per cage, 4.52 pounds of feed are wasted in a year. With two birds per cage, the loss is down to 2.01 pounds, and with three birds, the feed loss is only 1.08 pounds per bird per year.

Why the drop? With one bird per cage, there is more time at the feed trough, more time to pick over the feed, and more is wasted. On the basis of 10,000 birds in single cages, the feed loss is equivalent to 30 tons per year.

Another suggestion . . . fill the trough only half full and use wider and deeper troughs. Providing birds with too much light may also be a factor in their being more choosy about what they pick up and what they discard.

INDOOR RAIN

Dairy barn ventilation in winter is just as important as in midsummer, though for another reason.

The problem in summer is to keep the air moving and keep the animals comfortable. In winter, the object is to get the moisture out of the building before it condenses.

Moisture laden air, when warmed even slightly, moves upward to the peak of the roof. If it has no way of escaping, it condenses on the underside of the roof and "indoor rain" results.

On stanchion barns, the doors, windows and vents should be kept open . . . except during storms . . . to carry off this excess moisture. On loose housed and free-stall barns, the moisture problem may be solved with a narrow opening at the peak of the roof. This opening may already be there, but covered with a roof cap.

Better still, a roof ventilator is a low-cost means of drying out the cattle housing area.

GARDEN STATE

A tribute to agriculture in the Garden State is the 24-page booklet entitled "The Riches of New Jersey," published by the Public Service Electric and Gas Company. Included are full-color photographs of 12 of the state's farm commodities, along with pages of recipes featuring these products. For your copy, write: Public Service, 80 Park Place, Newark, New Jersey 07101.

LIKES FARM RECORDS

Some years ago, when bulk tanks were becoming common, the editors of American Agriculturist suggested several times that dairymen consider buying them while premiums for bulk milk were still being paid. Among those who followed our suggestion was James Rahr of Scio, New York.

"In 1959," he said, "I was paying 20 cents a hundred to have my milk hauled. When I was offered a premium of 25 cents if I would put in a bulk tank, and believing that the premium would not continue forever, I took the plunge."

Jim's farming record is one of slow but steady expansion.

"I have always given a lot of importance to farm records," he commented. "I first became interested when I studied vocational agriculture in high school for four years. I graduated in 1945, and worked on this farm with my Dad for wages until 1950."

Apparently the outlook wasn't too encouraging, because he took a job in the gas field near Pittsburgh at this time.

"But I wasn't satisfied," he declared. "I wanted to farm, but felt I needed more training, so I went to Alfred to specialize in power farm machinery and graduated in 1954. That fall Dad agreed to let me manage the farm. He was as good as his word, and never interfered."

At that time the herd consisted of 17 cows, with a herd average of 6500 lbs. of milk. In the fall of '54 Jim bought 15, bringing the herd to 35, and the following spring he began to breed artificially. The last cow bought was purchased in 1957.

The next step in expansion was an addition to the barn 42′ × 60′ in 1960.

"The lumber for the barn was cut on the farm, which cut the cash cost appreciably," Jim commented. "At that time," he added, "we added room for 30 more cows, and the following year the herd average was 12,000 lbs. And by 1965 it had increased to 15,500 lbs.! I bought the complete farm from Dad Jan 1, 1961."

Before this, two wood stave silos 14′ × 36′ held corn silage for the herd, but in 1965 they were torn down and the staves and hoops used in a 20′ × 40′ silo.

Whole Hog

Jim commented as follows: "I went to the bank for some financing, and I was asked, 'Why don't you go whole hog and build the silo capacity, free stalls, and milking parlor you will need?' I didn't want to get that deep in debt, but after thinking it over a year I decided my friend the banker was right, and I built two more the same size and automated the dairy operation in the spring of 1966.

"First cutting hay, finished in 1968 by July 1, goes into the silos as haylage, 500 tons of it. The second cutting is baled; we put up 4000 to 5000 bales. When we start haying we cut and condition every forenoon. Weather permitting, it cures in 24 hours.

"We grow 60 acres of corn, which also goes in the silo. Some corn is fed to young stock as grain, but all the concentrates for the dairy are bought."

In 1965 Jim bought a self-unloading wagon, and added a second in the following year.

Management

Obviously, Jim puts great importance on management.

"With good management," he observed, "a man can make more money with a big herd. With poor management, he can lose more.

"We have kept DHIA records on the cows for years, but now we get an analysis of our farm records through cooperation with Agway. Roughage is analyzed for protein, we send in figures on milk production, farm costs, and farm receipts, and get a report each month.

"When the report comes I spend a half hour studying it, then refer to it frequently. We have certain goals . . . for example, to keep investment below $1500 per cow, and to watch the cost per cwt. of milk, as well as milk produced per man per year, which now is around 480,000 lbs."

Incidentally, the farm is run by Jim, one full-time hired man, a brother who works part-time, and a nephew who is 17 and in school. Jim's final comment was, "I never miss a county dairy tour, and I always learn something I can use."

To America's Family Farmers
From the Head of a Family Firm:

Royster Company
P. O. DRAWER 1940 • NORFOLK, VIRGINIA 23501
CHARLES F. BURROUGHS, Jr., President

November, 1969

From the day in 1885 when F. S. Royster hired my father full-time (at age 13), our firm has shared a growing personal involvement with your grandparents, your parents, and now with you.

We long ago learned that as you prosper -- or don't -- so do we. And that to deserve your trade we must first earn your trust.

So from the start we set our sights on the primary goal: Unquestioned Product Quality. Only then could we begin to add services we felt would be useful to you, and a continuing series of innovations like the leaf tissue and soil test check analyses -- now industry standards.

We want to reaffirm here our sense of commitment to agriculture in general and to you in particular. We believe we understand better than most the real source of the many challenges you face: where once you could market enough of what you produced to make a living, now you must produce what you can market to make a profit.

We hereby renew our pledge to hold fast to the "old-fashioned" attitudes and practices that built Royster Company. They're even more important to you and to us today. As are innovations. We have more coming.

Should you ever have a question or complaint about us, write to me personally, and I'll look into it. One of my privileges as head of a family firm is being able to get action without consulting a computer.

But Royster's greatest privilege is simply to be closely involved with farmers, farming, and the soil upon which just about everything depends.

May your Thanksgiving and Holiday Season be joyous and true... and may you live and work proudly in a peaceful, prosperous 1970.

Sincerely,

Charles F. Burroughs, Jr.
President

Have you ever seen a forest fire trap? That's right. You have one in your car . . . it's your ash tray. Please use it.

ONE BARN-TWO HERDS

Thomas Burns and his father, James, operate a dairy farm at Bovina Center (Delaware County), New York. The combined herd includes 13 milkers owned by Tom, and 53 owned by Jim.

Tom's recent DHIA rolling herd average was 21,078 pounds of milk (745 fat), and Jim's was 17,200 and 642. The younger dairyman here feeds often during the winter . . . including grain five times a day, corn silage twice, and three daily shots at the hay bales. Tom is convinced that the more grain feeding is dispersed over a 24-hour period, the greater the utilization by the cow.

Grain ration is made up by adding 500 pounds of citrus pulp to every ton of commercial dairy ration (18 percent guaranteed protein). Amounts fed correspond fairly closely to DHIA recommendations, but not to exceed 50 pounds per cow per day . . . on some top producers the IBM machine calculating nutritive needs calls for more than that. Tom's top record for one cow's lactation has been 25,850 pounds of milk, 891 of fat in 288 days.

Tom reports feeding 35 pounds of silage per cow per day during the barn feeding seasons; the rest of the home-grown roughage need is met by hay. The same roughage feeding pattern is used for the entire herd.

Differences

What things are different between the handling of the cows owned by father and son? For one thing, Jim doesn't add citrus pulp to the grain . . . and he doesn't feed it as often as Tom does. Also, Tom culls more heavily . . . believing that a cow should reach at least 75 pounds of milk per day early in lactation.

He prefers heifers to calve when 26 months of age, and tries to have all animals freshen during August-December. He breeds first-calf heifers with Jersey bull semen to minimize parturition problems, therefore raises no offspring from them. He plans a two-month dry period between lactations.

Acetonemia has been a problem at times here, and a liquid preventative is fed with the pelleted grain when necessary.

Dairying isn't the only enterprise that stirs Tom's competitive spirit. He also races snowmobiles, and came in first at 11 of the events he entered during the 1968-69 season. — *G.L.C.*

Tom (left) and James Burns.

PLYWOOD COATINGS

T.J. Patterson, head of the coatings and finishes section of the American Plywood Association, Tacoma, Washington, gives these recommendations for finishing plywood farm buildings:

1. Store plywood to be finished in a cool, dry place out of the sun, protected from heaters and highly-humid conditions which frequently exist at a construction site.

2. Before installation, plywood should attain a moisture content equivalent to what it will average in service, but before finishing is started, surfaces should be dry. At least two days of drying should be allowed after a long, heavy rain, and finishing should be done only during dry weather at a minimum temperature of 50 degrees F.

3. Plywood panels for exteriors should be edge-sealed and face-primed as soon as possible, with one or two heavy coats of top-quality exterior house paint primer or aluminum paint specifically formulated for wood.

4. Use only paint products formulated for use on wood, not those formulated for metal finishing. Prime and finish coats should be companion products of the same manufacturer to insure adhesion between coats.

5. Each coat of paint should be permitted to dry before the following coat is applied, but painting should be completed as soon as practical to obtain good adhesion between coats.

Exposure tests have demonstrated, Patterson reports, that acrylic latex finishes for plywood are more resistant to checking and peeling than other paints. An oil primer is necessary with the latex topcoat for good paint adhesion. —

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McCulloch's Power Mac 6—world's lightest chain saw—is a winner.

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"Of the 206 Power Mac 6 units we've purchased to date, 204 are still on the job! We normally 'write off' a chain saw after 400 hours of operation—an average of 20 running hours per week for 20 weeks. Our records indicate that our Power Mac 6 saws are actually lasting well past 400 hours... In addition, maintenance costs on the Mac 6 have been extremely low, and there's been a noticeable increase in crew efficiency—a direct result of the saw's light weight and remarkable handling characteristics."

Yes, any way you look at it, the Power Mac 6 wins. And don't forget. Now, there's the Power Mac 6-A. "A" for automatic oiling. A very handy feature on a very handy saw.

Isn't it time you put your money on a winner? Start by looking up your McCulloch dealer in the Yellow Pages under "Saws."

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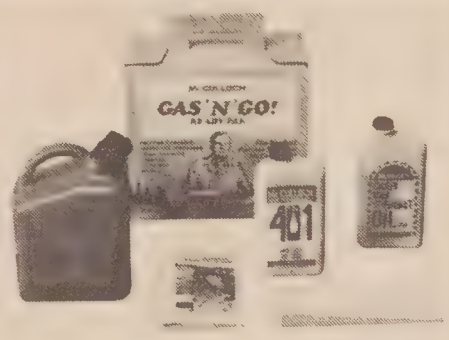

For a limited time only! Everything you need to gas up and get going with the new McCulloch of your choice. And it all comes packaged in a handy carrying case, normally priced at $8.85. While promotional quantities last, this kit is free at all participating McCulloch dealers with your purchase of any new McCulloch chain saw. So don't get left out. Find your McCulloch dealer fast in the Yellow Pages under "Saws."

McCulloch

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FG

OPERATION ARBOR GREEN

by Howard H. Wilson, Jr.*

THE Broome County (New York) Soil and Water Conservation District has tried many ways to sell suburban landowners on land treatment. But nobody ever seemed to get very excited about doing anything . . . except building dams.

Until the spring of 1969, that is. Then Sam Rizzi, a District director who lives in the Patterson Creek watershed, came up with a new idea to get more land treatment. "I have neighbors in the housing development where I live who need 1, 2, 10 or 20 trees for planting banks or odd corners, or for wildlife cover, or just for beautification.

"Most of us have big mortgages and can't afford large nursery trees. And, of course, we can't get New York State Conservation Department nursery trees in small quantities. So why can't the Soil and Water Conservation District buy some seedlings and sell to homeowners the number they need?"

*Soil Conservation Service, Binghamton, New York.

The other directors had their doubts, but agreed to buy 1,000 trees. Sam volunteered to do the publicity. He did a good job, too. Dubbed "Operation Arbor Green," the project got excellent press, radio and TV coverage. The news was continuous, not just a one-announcement deal.

Those 1,000 trees were all spoken for **in the first hour** the District accepted orders. So the directors decided to keep on taking orders.

Soon they had 1,000 orders for a total of 26,500 trees! The calls came so fast that two District clerks spent several days just answering the SCS and District phones. When calls came faster than they could handle them, the federal switchboard operator transferred calls to the Agricultural Stabilization and Conservation Service and Farmers Home Administration . . . finally, in desperation, she started taking orders herself!

So many callers complained about the constant busy signal that the telephone company sent a man to see why the phone was out of order. People who couldn't get a call through came and stood in line outside the office door to order trees.

The girls figure they had more than 2,000 callers. Very few of these people had ever had any previous contact with the District, or any of the other agencies in the Broome County Farm and Home Center near Binghamton. They were amazed to find such services were available.

Wrap Up

The District manager hired three people for three weeks to help him wrap and sell trees. The Broome County Department of Parks and Recreation provided a man full time. The Soil Conservation Service and Cooperative Extension people also assisted. "Operation Arbor Green" went off very smoothly, once things were organized and running.

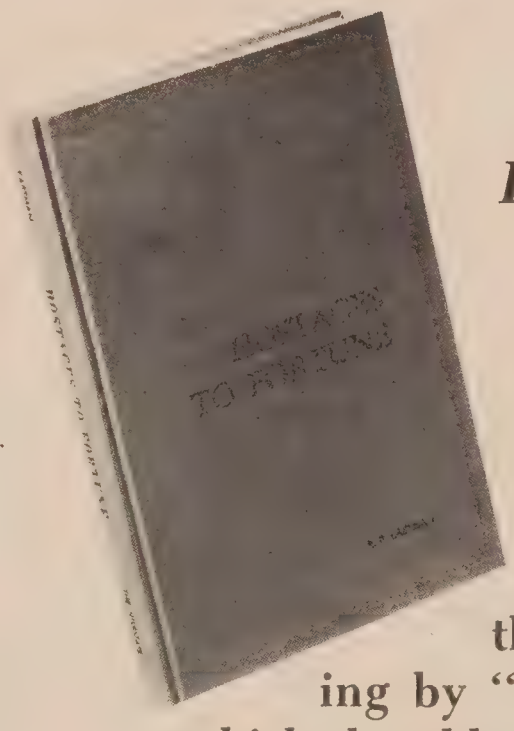
The only complaint the District had was from a man who refused the white pine trees he ordered. He said they were green and not white, as advertised!

Next year the District directors plan to increase the number of varieties of trees, and add some wildlife shrubs. They are in hopes that such a program is just a beginning of many ways the District can expand its program to reach more urban and suburban landowners and get more land treatment done.

Tom Shields, Broome County Soil and Water Conservation District manager, examines Norway spruce and white pine seedlings heeled in for "Operation Arbor Green" sale.

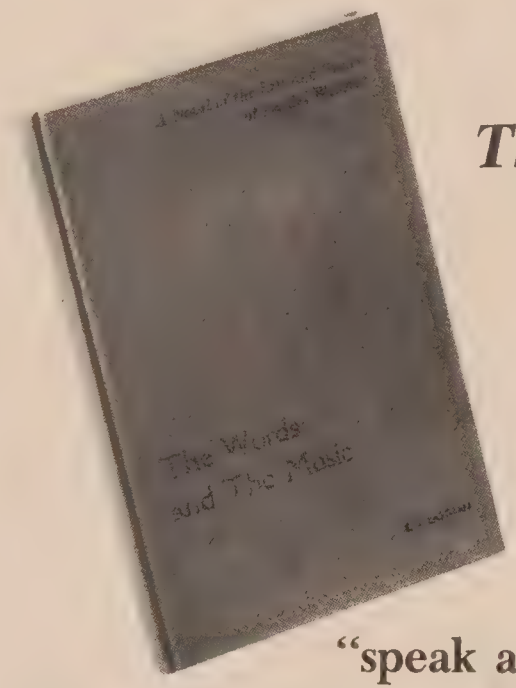
Dutch Elm Disease — The search for American elm trees highly resistant to the destructive Dutch elm disease is going on at the New York State College of Agriculture under a three-year, $75,000 grant from the Elm Tree Institute. Scientists will try to develop a number of shade tree strains able to withstand the epidemic that is rapidly wiping out elm trees throughout the nation.

E.R. Eastman's Books



Hostages To Fortune

Throughout this novel of early days in the Finger Lakes Region of New York runs a tender and understanding love story. Interwoven into it is the eternal and inevitable conflict between the generations . . . the new ideas of farming by "book larnin' " and the tried and true ways to which the older generation clung so tenaciously.



The Words and The Music

Even as a small boy Dan Webster showed that power of oratory which led him on to leadership in one of America's most turbulent periods. The teamsters who stopped at his father's tavern would tease little Dan to "speak a piece."

Here's an opportunity to add to your library of Ed Eastman's writings at a big savings.

Through a special arrangement with the publishers we are able to offer both of these books at a special price of $4.85, plus 45 cents for handling, postage and New York State tax. May be ordered separately; tax, and post paid for $3.33 each.

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LIVESTOCK

Eastern Feeder – The former Briarcliff Farm in Dutchess County, New York, is now owned by the United Stockyards, Inc. Managed by Conrad Maslonka, the operation (now called Stockbriar Farm) feeds 6,000 head of meat animals at a time . . . some of which are Holstein steers. It's expected that 14,000 head of cattle will be fed out there in calendar 1969.

Health Help – A recent report on beef animal health experiments summarizes the results of 27 trials at 7 locations. Aureomycin Sulmet Crumbles . . . a mixture of an antibiotic plus a sulfa drug . . . was the material tested.

Results indicate, for the treated cattle versus the control groups:

–increased daily gain
–greater feed efficiencies
–lowered incidence of disease
–a 6-to-1 return on medication investment.

For more details, write: Animal Health Department, American Cyanimid Company, Princeton, New Jersey 08540.

Handbook – A Meat Evaluation Handbook printed by the Meat Board is a valuable asset for college animal meat science courses in meat evaluation and meat judging . . . and a valuable tool for packers, processors, wholesalers and retailers. Many individuals and companies worked on the publication. Copies are $5 and can be obtained by writing to: Meat Board Reports, 36 South Wabash Avenue, Chicago, Illinois 60603.

Eats Sawdust – Animal nutritionists at Pennsylvania State University report that oak sawdust is a successful substitute for ground hay in making up finishing rations for beef cattle.

A 103-day feeding trial on 30 Hereford steers showed that feedlot performance and percentages of useable meat from each carcass were similar for steers fed sawdust and those fed ground hay roughage. All rations were supplemented with vitamins A, D, and E.

Several experiments at Penn State are analyzing inexpensive waste products as substitutes for hay.

Roundworms – Dr. Robert Kilgore, veterinary researcher for Merck & Co., reports that 8 out of 10 cattle are hosts to roundworms, yet 95 to 100 cases go unobserved and untreated. He advocated that cattlemen adopt parasite control programs aimed at breaking the roundworm life cycle, plus regular worming with "Thibensole," the wormer which has been shown to be most consistently effective against the four major types of cattle roundworms. Gains following this treatment, he said, "can spell the difference between profit and no profit in marginal operations, and a very substantial increase for a profitable operation."

MEAT ANIMAL SONAR

Back in November 1968, American Agriculturist reported the development of a device for "reading" and recording an interior cross section of a living animal to detect its body characteristics, and to scientifically select the best meat animal breeding stock.

Now the machine, which was originated by Professor Jim Stouffer of Cornell University, is in commercial production in Ithaca. Named AN/SCAN (Animal Scanner), the device uses ultrasonic waves, similar to the Navy's sonar, to generate a Polaroid photograph (AN/SCANogram) to provide a simple, accurate way to determine meat content, lean-to-fat ratio, and observe other interior characteristics. Completely harmless to animal and operator, AN/SCAN may be used on swine, sheep, cattle or other animals.

For complete information about the AN/SCAN, write: Ithaco, 735 West Clinton Street, Ithaca, New York 14850.

Dr. Jim Stouffer, at right behind AN/SCAN, as technician William White demonstrates the "scanner saddle."

How to add milk-making power to your homegrown grain

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Agway Dairy Concentrates can add milk-making power to your homegrown grain.

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Agway Dairy Concentrates give you a crumble form of feed with all the nutrients your cows need for high production of milk and good health.

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A lack of balance in a ration—deficiency in the mineral and vitamin content—could be costing you money. A balanced ration is much more critical for cows with high-production potential than for low producers. You may have cows producing 12,000 or 13,000 lbs. of milk, cows that could be making 18,000 to 20,000 lbs. if fed a balanced ration.

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Switch to Agway Dairy Concentrates. Call your Agway man today to discuss your concentrate needs—and ask about the Agway Profit Feeding Plan.

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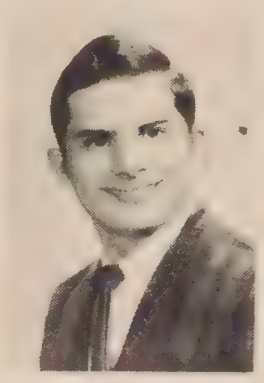
FARM ENTERPRISE SERVICE

AMERICAN AGRICULTURIST FOUNDATION

BOY AND GIRL-OF-THE-YEAR

For many years, the American Agriculturist Foundation has made awards to students in vocational agriculture and vocational homemaking in the high schools of the Northeast. In 1968 a new project was initiated, that of choosing a Boy and Girl-of-the-Year from the reports sent in by teachers and principals for the Foundation Award.


Raoul Lufbery

Chosen Boy-of-the-Year for 1969 by the Foundation judges was **Raoul C. Lufbery,** son of Mrs. And Mrs. Raoul F. Lufbery of North Haven, Connecticut, and a former student at Lyman Hall High School in Wallingford.

Raoul first entered the regional vocational agriculture department at Lyman Hall in September of 1966, in the forestry and wildlife curriculum. After his initial contact with forestry he undertook his first major conservation project . . . planting 500 white birch trees for a neighbor after school hours, and during November of his sophomore year he selected to improve a small woodlot at the rear of his home.

From the beginning of his high school career, Raoul showed real leadership ability. At the spring fair for New Haven County grade school children, he developed a small exhibit showing pointers on trapping, pelts that can be trapped in Connecticut, the safe use of forestry hand tools, outdoor camping equipment, and Connecticut trout. The exhibit was viewed by approximately 2000 grade school youngsters.

Summer brought the opportunity to learn more about waterfowl, so he and his brother built a small pond. Raoul stocked it with frogs' eggs . . . and from then on developed collecting fever. The first collection, naturally, was of frogs' eggs through their various stages of development from egg to adult.

TV Show

As a result of his collecting interests, he was given special recommendation by the Connecticut Forestry and Wildlife Department of Vocational Agriculture on the Frank Atwood Television Show for an exhibit of animal skulls, with special emphasis on those found in Connecticut woodlands. Among his other collections were ones showing day-by-day growth of chicks, wood samples and how to recognize them, and a horseshoe crab collection showing the development from young to adult.

During the spring of 1967, Raoul again chairmaned the wildlife and forestry exhibit display for New Haven County school children, using his growing collections and live animals . . . snakes, turtles, etc. He repeated this in 1968, and the fair authorities estimated that in three days close to 87,000 people viewed the exhibit.

FFA Activities

Raoul was active in FFA chapter activities, and his total work experience program as a vocational agriculture student reached 1968 hours for the school year of 1967-68. He represented Lyman Hall FFA chapter at the National Convention in Kansas City, Missouri, and was presented with the award of Wildlife Conservationist-of-the-Year in Connecticut, an award sponsored jointly by the Connecticut Federation of Wildlife, National Federation of Wildlife, and the Sears Roebuck Foundation. And with all of his outside interests and activities he maintained his place in the upper 24th of his class!

Raoul is now attending the University of West Virginia, and we are happy indeed that the Foundation Award will help him with his continuing education. We feel sure that he will continue to be successful in whatever projects he undertakes . . . and that those projects will be interesting ones.

Girl-Of-The-Year

In 1968 a student at North East High School, North East, Pennsylvania, took honors as American Agriculturist Foundation Girl-of-the-Year. The location was repeated in 1969, when **Jayne Rodencal,** daughter of Mr. and Mrs. EdwardRodencal of North East, was chosen as 1969 Girl-of-the-Year

Jayne Rodencal

Jayne is described by her homemaking teacher, Mrs. Rainsolo, as "an outstanding and very deserving girl." She took home economics for two years in junior

(Continued on next page)

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CUT THE CROSSFIRE!

According to Champion Spark Plug Company, crossfire occurs when one spark plug is fired out of time by induced voltage. As a result, engine roughness, backfiring or detonation may occur. In extreme cases, spark plug and even engine damage may result.

Here's what causes crossfire. Whenever high voltage flows through a spark plug ignition cable, a magnetic field is created around that wire. If an adjacent cable is close enough in the magnetic field and parallel to the cable carrying the high voltage, enough induced voltage may be absorbed to fire both plugs at the same time.

Correcting crossfire in consecutively firing cylinders is simple. Merely space the two critical cables as far apart as possible. You may also criss-cross the cables in the holding grommets, not allowing them to run parallel for any appreciable length.

Never tape the cables together in a "neat package." If possible, separate the cables for adjoining cylinders by placing other cables of the same bank between them.

To make certain you know which cables are apt to be involved in a crossfire situation, consult manufacturers' literature to determine the firing order of the cylinders.

Here's a Wadsworth cabbage harvester doing its job on part of the 160 acres of cabbage being grown by the Zimmerman family of Stanley, New York. That's Charles on the tractor, Wilfred on the truck, and their sister, Mrs. Florence Johnson, at the truck controls. Here's a harvest crew some different in number than was the case only a few years ago!

Head Rollers – There are three manufacturers of mechanical cabbage harvesters at present:

–Emanuel Boyer, Albion, New York.

–Lowe Machine Co., Oak Harbor, Ohio.

–Clyde Welding Service (William Wadsworth) Clyde, Ohio.

In addition, Clifford Kunes of Seneca Castle, New York, has a self-propelled, hydraulically-operated unit that he built . . . but not for sale.

Cornell specialists . . . who originally developed some of the components of these machines . . . report a **ninefold** increase in labor efficiency as compared to the handwork of harvesting yesteryear's kraut crops.

Foundation . . . . .

(Continued from page 20)

high school, and three years of vocational home economics in senior high. She is described as "one of those rare individuals who has successfully combined vocational home economics, academic courses, church and community activities, extra-curricular activities, and family relationships with such skill as to be in the first ten of her graduating class of 125 students. In addition, she was one of the best-liked girls in the senior class."

From the beginning of her three years in the North East chapter of the Future Homemakers of America, Jayne was one of its most active members. She was appointed delegate to the State FHA Convention in Pittsburgh, Pennsylvania, earned her junior and chapter degrees, and in January of 1969 was awarded the State Homemaker Degree at the Pennsylvania State Farm Show in Harrisburg.

Jayne is the second child in a family of five, and has always taken a great interest in helping physically-handicapped people. This comes naturally, for she was only 10 years old when her mother contracted polio and needed Jayne's assistance with the younger children.

The family lives on a grape farm, and Jayne works in the vineyards . . . and can take her turn along with her brothers at driving tractor.

Jayne has plans to further her education, and American Agriculturist Foundation is happy to have a part in it. We feel sure she will continue to "do herself proud!"

Today, power has a new name. NUFFIELD.

Now that Nuffield has arrived, you can put your tractor money into the thing that matters—performance, not chrome and clutter. With Nuffield, you get more working weight and horsepower per dollar than any other tractor in its class. ☐ Who makes it? Who backs you for parts and service? The same international corporation—British Leyland Motors—that has made Jaguar, MG, Austin, Triumph, Rover and Land Rover respected names throughout the world. ☐ Write your Nuffield distributor for complete details, and make your tractor money work harder for you. A whole lot harder.

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BRITISH LEYLAND NUFFIELD TRACTORS

69-H21

The J. I. Case Company has a new trademark, and a newly-styled and engineered line of tractors. Appropriately numbered for the decade of the 70's, the new line (pictured) shows the Model 770 in the foreground . . . and, from left, the 1070, 870, 970, and the 1470.

The new engine designs have been under development for the past five years . . . and the first one to be officially tested (the 1470) has established an all-time fuel economy record for all tractors over 39 h.p.

The "70" series has a new 12-speed power shift transmission with four ranges and three speeds in each range. Speeds can be changed within each range under full power without stopping or clutching.

There is a choice of three seats (exclusive in the industry) for operator comfort. An optional cab has been engineered for maximum quietness, and affords roll protection in the case of accidental turnover.

Other new features of the Agri King Line include quick-change 540-1000 PTO on a single shaft, self-adjusting hydraulic or power brakes, 50-gallon nylon fuel tank, hydraulic shock-absorbing seat suspension, and a 5-position tilt adjustment and telescopic steering wheel.

After 104 years of service as the J. I. Case Company trademark, the famous "Old Abe" eagle trademark has been replaced by a new corporate symbol (see below).

case

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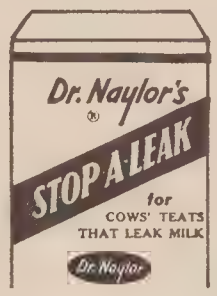

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I certify that the statements made by me above are correct and complete. A. James Hall, Publisher

George Lupold finds caged pullets can be handled efficiently in his windowless house.

POULTRYMEN WITHOUT EGGS

by Gordon Conklin

NOT many farmers would think much of keeping thousands of cacklers that produce nary an egg . . . or at least darned few of them! But there's a new breed of poultrymen that has developed almost overnight in the Northeast . . . specializing in raising birds from chicks to pullets, but sending them to other producers for their laying flocks.

George and Earl Lupold, Armington Road, Palmyra, New York, raise pullets in cages from baby chicks to 20-week-old pullets. Their windowless poultry house holds 16,000 birds in four rows of cages (4 strings of cages per row).

Top First

Chicks, dubbed at day-old, are placed in only the top two strings of cages in each row upon arrival . . . 20 per 24×20-inch cage. Newspapers in the bottom of cages are removed after 10 days. At an age of 5 to 7 weeks, birds are then moved down to lower rows of cages, so there are only 10 per cage.

Supplementary wire inserts prevent chicks from filtering through cage fronts for the first four weeks. Previously, the Lupolds used trigger extensions on the Hart watering cups to help baby chicks get water, but not with the last batch. Chick-starter tanks installed in the water line substitute gravity pressure for conventional water-line pressure, and this lowered "push" facilitates the operation of cup triggers by the feather-light touch of tiny beaks.

Vaccination

The watering system is used for bronchitis vaccination . . .at 4 days, 4 weeks, and 14 weeks of age. No coccidiosis program, of course, is needed with cage birds.

Chicks are warmed by hot water circulated in iron pipes located between the back-to-back upper cage rows; the planned temperature at first is 78 to 80 degrees Fahrenheit. There is only one furnace, but two circulating pumps . . . either one of which can do the entire circulating job if one pump goes on the fritz. An auxiliary generator (15 K.W.), powered by PTO from a tractor, is part of the farm equipment.

Other emergency equipment includes a warning system that sounds off at George's home whenever temperatures fall below a preset level at the growing house. In addition, George's home is equipped with a warning device actuated by an outage of highline electric power.

There are five rows of electric lights in the growing house, each row equipped with a dimmer switch that can vary light output from the full 25-watt capacity of each bulb down to the merest glow. There are light baffles on each of the two groups of three fans, but some light does leak into the house from ventilating ducts along the eaves.

Dropping boards between upper and lower cage strings are cleaned at two-week intervals . . . and pits under cages are emptied when birds are 12-14 weeks of age, as well as after each batch moves out. There are 300 acres involved in this dairy-poultry operation, so there is no shortage of room for manure disposal.

Cleaned

Between batches, the building interior is "sanitized" . . . hosed down with a high-pressure rig that squirts a combination of cleaner and disinfectant. Two foggers (the same type as those used to apply fly spray), loaded with disinfectant, finish the job of killing any unwelcome guests.

When it's time for a batch of pullets to move out, the Lupolds gather members of the family, plus hiring some neighbors, to form a catching crew. George reports that 12 people can put 6,000 birds on trucks in two hours of hard work.

A new cycle begins around February 20 to March 1 (birds

(Continued on next page)

POSTAL PROBLEM

Representative Thaddeus J. Dulski of Buffalo, New York, chairman of the House Committee on Post Office and Civil Service, voiced his opposition to the postal corporation plan at a legislative breakfast in Boston recently.

He said, "The Post Office, with its tens of thousands of buildings, hundreds of thousands of employees, and billions of dollars of revenue and spending, is just too big and too important in the overall scheme of government to be cut off and insulated from the government as a whole.

"The President should be enabled to make a reasonable amount of use of post office policy as part of overall government management and economic guidance.

"We are very fortunate at the present time in having an outstanding administration at the Post Office Department. I personally doubt if anyone of Postmaster General Blount's capability could be recruited unless Cabinet status were offered to him."

Representative Dulski praised the Postmaster General's choice of men for top positions and said, "They will mature in their appreciation not only of the problems but of the vast accomplishments of the Post Office Department." He quoted a public opinion survey that showed 76 percent of the people are "completely satisfied" with the service they get, and 19 percent "fairly well satisfied."

He said that first class postage could go to 12 or 15 cents under a corporation plan. "Costs are going up — not down. Since the corporation would be obliged to operate on a break-even basis, it will need more revenue or else it will need to curtail services — maybe both."

He concluded by saying that he believed the bill he introduced in January to completely reorganize the Department would be "a lot more acceptable to the public than trying to convert the Department into a public corporation."

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Without eggs . . . . .

(Continued from page 22)

out 10-15 July) . . . and another about August 20 (out in the middle of January). This pattern allows good labor distribution, avoiding poultry labor peaks that might overlap the labor peaks of dairying and crop raising.

Flexible

Low labor requirements and daily scheduling flexibility are two advantages the Lupolds saw in the pullet-starting enterprise. They had practically no poultry experience before beginning their present operation . . . and therefore go pretty much "by the book" without having to "unlearn" anything!

They grow birds for the Babcock Poultry Farm, Inc. of Ithaca; any problem brings a quick visit from a Babcock fieldman . . . or from a feed-company (Purina) representative. These folks were around quite a bit at the start, but less often as the Lupolds gained experience. Hatchery personnel debeak the birds at 16 weeks of age.

The Lupolds, then, are integrated . . . in the poultry business sense of the word . . . and they like it that way. They're paid a specified amount for each marketable bird that goes out the door to the truck, and they provide only labor and the building.

What do you suppose will be next in this Age of Specialization?

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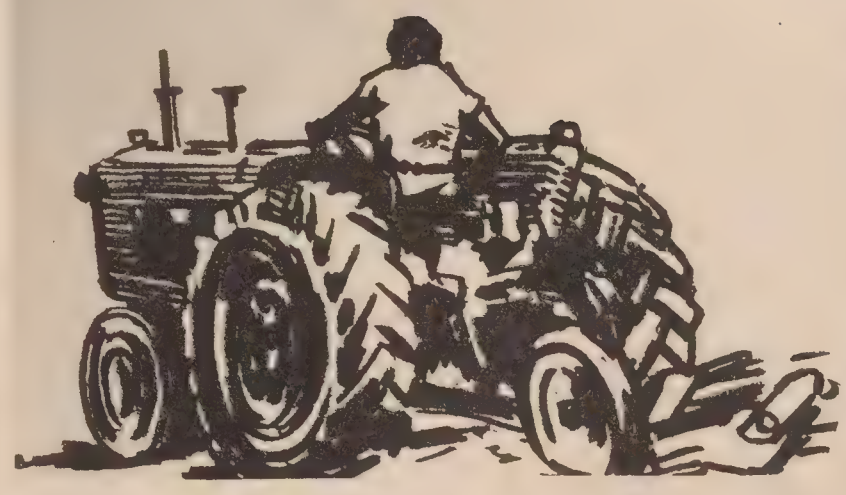

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Personal Farm Experience

Alex and Elisabeth Rabeler

RECREATION FARM

HOW would you like to have 80-100 guests on your farm all summer long? That's the number on the roster at the Suits-Us Farm owned by Alex W. Rabeler and his wife, Elisabeth, near Bovina Center, New York.

It's 350 acres in the valley of the Little Delaware River, and across the hilltops alongside. At one time, it produced milk . . . but for six years now the dairy has been gone. Actually, keeping tourists was started here 14 years ago, even before the milk-producing business was discontinued.

Off Season

And not all of them arrive in the summer . . . the Rabelers had 60 people on last New Year's Day, and an average of 50 hunters for the three weeks of deer season in the fall of 1968! Most of them are from Long Island, New York City, and metropolitan New Jersey, but there's a sprinkling from far and wide. Interestingly, very few are from the concrete cliff dwellings of the big-city apartment complexes; the overwhelming majority own their one-family homes.

The Rabelers maintain a very informal atmosphere at their place . . . guests can wander into the kitchen at any time to see what's cooking. Meals are not planned weeks in advance . . . Elisabeth comments, "I sometimes don't know at 10 a.m. what we're going to have for lunch!" All guests eat the food being offered . . . no menu is provided . . . and they love the country-style food!

Liability

One of the problem areas connected with the recreational business concerns liability insurance in an age when most people tend to look to someone else to pay for any injury . . . even if it is the injured person's fault. Alex reports that four percent of the gross income will likely be required for liability insurance alone . . . more if riding horses or ski facilities are involved.

Taking the abrasive issue of liability in stride is one of the necessities for this kind of enterprise. "In fact," Alex adds, "you've got to like people, and be willing to work very hard, to operate a recreation business successfully. If you don't, forget it!"

Ever since starting 14 years ago, the Rabelers have cooperated with Farm Vacations, Inc. . . . an organization that checks out hundreds of vacation farms over the entire nation. A directory of these farms may be obtained by writing to: Farm Vacations and Holidays, Inc., 500 Fifth Avenue, New York, New York.

Looking ahead, Alex and Elisabeth would like to have a landing strip for private planes somewhere on the farm. Their goal is a capacity of 200 people at one time . . . beyond that number they believe the personal touch is lost. The dairy stable basement, now a recreation area, will be converted to a kitchen and dining area.

Just as with building an outstanding dairy herd . . . or putting together a top-notch business of any kind . . . recreation farming requires persistence, hard work, management ability, capital, and time. — *G.L.C.*

HIGH MOISTURE CORN

"Corn is our big crop," said Laverne Brooks of Peterboro, New York. "We grow 144 acres, with around 44 acres going in silos and the shelled corn from 100 acres going into our Harvestore as high-moisture corn. The stalks from the 100 acres are plowed under."

Laverne Brooks

The Brooks farm is a father–and–son partnership, and the agreement is not verbal . . . as is often the case . . . but is specific and on paper. The son William is married. Both wives are included in the agreement, and consideration is being given to hiring another member of the family.

"We need more help," Laverne commented, "and we haven't had much luck in hiring men."

Rents Land

The farm area (actually two farms) is 214 acres. However, another 200-acre farm is rented, and . . . when the Harvestore (20′×27′) was erected in 1966 . . . another 60 acres of good level land was rented for growing corn.

"When we began feeding high-moisture corn four years ago our feed bill dropped drastically," Laverne said. "Of course, it wasn't all gain. We rented some more land, and it costs money to raise corn. The first year we weighed the shelled corn and production was 3 tons per acre." High producers get 25 to 30 lbs. of high-moisture corn per day. Another Harvestore (20′×60′) is used for haylage.

(Continued)

Some oats are grown, and in 1968 the men tried an experiment. About 30 bushels of whole oats were spread on top of each load of corn (perhaps 3 tons) as it went into the silo. "We like it," Laverne commented.

Hay Crop

Hay is produced on 120 acres. Alfalfa predominates, but fields have some wet spots where alfalfa will not grow, so some alsike clover and timothy is included in the mixture.

The herd, largely grades but getting into purebred Holsteins, numbers 121, including young stock, with 70 to 80 milkers.

The cows have little pasture (6 acres); haylage and wet corn are fed all summer. The ration is the same in winter, except for the addition of corn silage.

"We are really sold on high-moisture corn for the herd," said Laverne. "Our B.F. test used to run from 3.3 to 3.7. Now it is from 3.6 to 4.1." — *Hugh Cosline*

Bob Pease has a convenient farm office in his home.

BEAN GROWER

Robert Pease, in partnership with Art Pritchard, grew 1000 acres of snap beans in 1969 in southwestern New York (Bob lives near Salamanca). Most of the acreage was rented, and all but about 250 acres were contracted to processors.

Why the surge of snap bean acreage in southwestern New York? For one thing, growing season rainfall is higher and more consistent there than in other nearby regions. Also, there are considerable acreages of well-drained soils that are available . . . especially Chenango gravel loam. It's not cheap to rent though, costing $25 to $40 annually per acre.

Soil Map

Bob uses a soil map to locate the acres adapted to snaps, and has used a helicopter to spot wet areas within fields of adapted soil types. Rented acreages range over a 50-mile radius, and a 10-acre field is about minimum to make operation worthwhile.

On land expected to be planted to beans again the following year, a rye cover crop is planted right after bean harvest. In the spring, this is plowed down as early as possible. Bob has experimented with minimum tillage, but does not recommend the practice for beans. Although the bean planting season here extends from May 15 to July 23, Bob and Art try to have plowing completed by May 10.

They like a soil pH of 6.5 for beans, but have had good crops at a lower level than that. Their land is usually rented on a year-to-year basis . . . occasionally a 3-year lease is used . . . and these renters spread quite a bit of lime each year.

Fertilizer

Fertilizer is usually 10-20-10, applied at rates of 350 to 450 pounds per acre. Rows are spaced at 36-inch intervals; all acreage is usually cultivated twice.

Eptam as an herbicide was used on 200 acres of beans in 1969, and Bob reports it worked well on grasses . . . Sinox took out the broadleaves. An insecticide (Sevin in 1969) is used routinely each season at the first-true-leaf stage, applied by helicopter.

A major problem has been white mold . . . in fact, some fields have been abandoned for bean growing because of the disease. Root rot, however, has not been a serious problem here.

This operation owns five high boy model mechanical bean pickers (each cost $17,000 new) that pick into 2-ton bulk bins that are hydraulically unloaded.

Strawberries

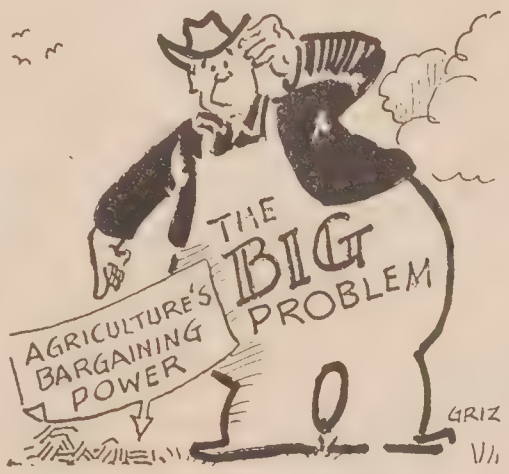
A secondary enterprise is growing strawberries . . . 20 to 30 acres each year. About half of the production is sold at a roadside stand at the Pease home (and a neighboring one up the road); the other half is marketed through a "Pick-Your-Own" arrangement.

Mrs. Pease handles the picking crew of around 30 people (all girls); Bob takes care of the "P-Y-O" business. Labor distribution is good . . . the strawberry harvest is completed just about the day bean-picking begins.

Varieties include Sparkle and Midway; certified virus-free plants are set out each year. Bob prefers Dymid as an herbicide . . . 3 pounds per acre right after planting, and another 3 pounds four weeks later.

On bearing plants, captan is applied every 7 days (every 5 if it's wet) after they begin to blossom. Thiodan cleans up spittlebug, applied just before bloom.

The labor force here includes 3 year-round men (Bob, Art, and one full-time employee), plus 7 more men during bean harvest. — *G.L.C.*



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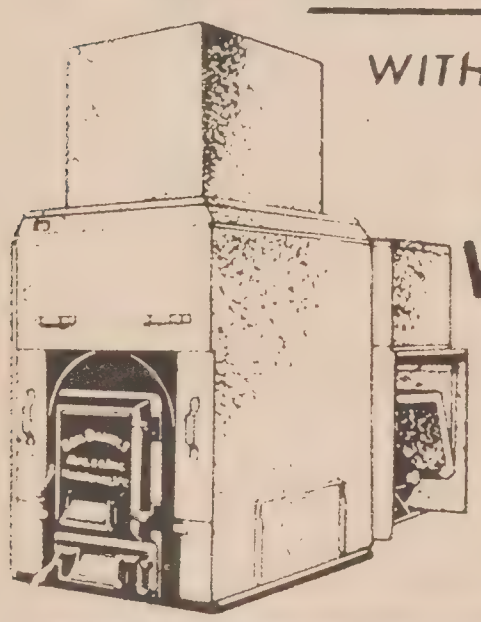

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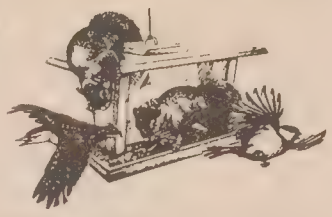

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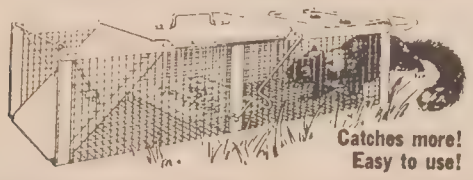

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"QUALITY PRODUCE SOLD LOCALLY"

by Hugh Cosline

"ONE of the goals we aim for is to produce the highest possible quality of potatoes and vegetables and find out whether we can sell high quality produce at a reasonable profit."

The speaker was Arthur Pratt . . . Dr. Pratt, if you want to be precise. However, most friends, of which there are many, just call him "Art."

Art retired from the Cornell Vegetable Crops Department at a relatively early age because he wanted to "farm it." After growing potatoes for several years, he and four others formed a corporation and bought land in Tompkins County, New York, with about 200 tillable acres.

Checked Soil

"Before we bought," Art explained, "we studied the soil maps of three counties. The type of land we wanted nearest to Ithaca was about 16 miles from the city."

The stockholders in the corporation include: Art, who is an expert on growing and marketing potatoes; Phil Minges of Cornell, who is the "idea man"; Roger Sandsted, also of Cornell, who is the man who knows most about snap beans and peas; Robert Clausen, a teacher and once a vo-ag instructor, who has charge of buildings and property; and Robert Heintz, a young farmer who works part-time at the vegetable farm. The name is Perry City Farms, Inc. Now let's talk about quality produce.

Variety

"Perhaps the biggest factor," said Art, "is variety. We have concentrated on three varieties of potatoes (one of which Art developed). One is especially good for baking, one for potato chips and French fries, and the other is an excellent early variety. In all, we grow 35 acres of potatoes and have built a good common storage house.

"In the case of sweet corn (another 23 acres), we plant about 15 varieties, mainly to get a good succession. We may cut the number some, but will continue to grow several varieties. We grow Nantes coreless carrots which we consider the best eating variety. Other crops include 5 acres of tomatoes, 2 of peas, 2 of snap beans, 4 of melons, 2 of cukes, 2 of squash, plus a few peppers, eggplant, lettuce, rhubarb, and red raspberries."

Adequate use of fertilizer, plus good weed control, helps quality by promoting rapid growth, but according to Art the next most important essential is irrigation.

"We have a creek running through the farm which has given us all the water we need. We like to put on an inch of water every 5 days if it doesn't rain."

The marketing program is unusual. Most of the vegetables, except potatoes, are "pick 'em yourself," or sold at the roadside stand. This provides an outlet for about half the crops grown. The balance is sold locally to four institutions . . . a hospital, a cooperative food store, a large manufacturing plant that runs a cafeteria for its employees, and a motel.

"We call each customer every morning to tell them what we have and they tell us what they can use. We deliver, although the motel plans to pick up their needs at the farm. We do not ship any crop except potatoes. We grow Harper hybrid melons, a new variety which makes good eating, but which is too soft to ship.

"We plan to increase total acreage, and one friend with experience in another area says we can double production and still sell locally."

Organization

Now a word about the organization. Stockholders have various amounts invested with a provision that no one person can own more than 49 percent of the stock. Anyone who wants to get out must first offer his stock to other stockholders.

Art is the only stockholder who puts in full time. He supervises land preparation and planting, also marketing. Bob Heintz manages the harvesting, Bob Clausen does some repair and construction, while the contribution of Phil Minges and Roger Sandsted is mainly advisory.

To run the farm takes 5 or 6 full-time men plus part-time workers during harvest.

"We hire several high school boys," said Art, "and have more applicants than we can use. Some are excellent workers and we encourage them by raising their pay according to performance."

Three things were of special interest to me:

1. The care used in buying the best available land. ("We were lucky," commented Art, "in being able to buy this place nearby with enough size and plenty of water for irrigation").

2. The attention given to quality, including the best varieties. "We are continually testing new varieties," said Art.

3. The sale of all produce locally. The farm produced its first crop in 1968. It will be interesting to watch developments in coming years.

LIVESTOCK MART

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Thanksgiving Feast,

the Easy Way . . .

by Alberta Shackelton

Thanksgiving dinner, complete with some or all of the traditional foods, no longer need represent long hours of preparation. Careful planning and shopping, doing much of the work ahead of time, and using some of the convenience foods now available can mean a more carefree, joyous family holiday celebration. The following Thanksgiving menu makes the above possible, and recipes are given for the starred items.

Cranberry Sherbet–Fruit Mélange. Canned or frozen fruit mixture with a dip of holiday-featured cranberry sherbet.

Roast Stuffed Turkey*. Frozen stuffed turkey roasted golden brown and garnished with pickled crabapples or peaches or a turkey stuffed with your own adaptation of packaged stuffing mix.

Giblet Gravy. Smooth, rich and brown with plenty of giblets, simmered and refrigerated the previous day.

Candied Sweet Potatoes. Ready to heat frozen or canned potatoes or yams to glaze yourself. Or serve **Duchess Potatoes** made with the addition of an egg yolk or two to fluffy white mashed potatoes (made with packaged or canned potato flakes, buds or granules), placed in shallow casserole and baked in a moderate oven 30 to 40 minutes.

Vegetable Scallop*. Frozen broccoli or asparagus spears with creamed tiny onions.

Ready to heat or Brown and Serve Crescent or Butterfly Rolls.

Cabbage Slaw with grated carrot, raisins or dates and walnuts, tossed with bottled Slaw Dressing or **Jellied Vegetable Ring*** with choice of prepared salad dressing.

Plum or Fig Pudding with Hard Sauce. Ready to heat or your own pudding made days ahead and stored (no freezing necessary). Make hard sauce ahead too and freeze. Or for a lighter dessert, **Orange Fluff*** made with orange juice concentrate.

ROAST STUFFED TURKEY

Choose the kind and size of turkey to meet your needs. An 8 to 12-pound bird will furnish 10 to 20 servings; a 12 to 16-pounder will serve 20 to 32 people.

If you choose a frozen stuffed turkey, **do not thaw before cooking.** Follow **accurately** the cooking directions on the package. The temperature of the stuffing itself should reach 165°F. Test by inserting thermometer in body cavity for about 5 minutes after turkey comes from oven; if reading is not at least 165°, return to oven until proper temperature is reached.

Note: Do not attempt to stuff your own turkey ahead and freeze it. Home freezers take too long to freeze through to the stuffing, and spoilage is possible.

To Roast Stuffed Turkey: Stuff turkey just before placing it in an oven preheated to 325°F. First, stuff neck end lightly and skewer neck skin to back. This is a good place to use an onion or more highly seasoned stuffing not desired by all eaters. Tuck wing tips behind shoulder joints.

To simplify stuffing body cavity, place turkey, neck end down, in a large mixing bowl. Rub cavity with salt and lightly stuff by cupfuls, then shake drumsticks slightly to insure bird is lightly stuffed and allow room for expansion while cooking. For tucking or trussing, push tail under band of skin into body cavity. Tuck each leg under band of skin or tie drumsticks to tail.

Place stuffed bird, breast side up, on a rack in a shallow roasting pan. Brush lightly with melted fat. Insert thermometer if used in thickest part of inside thigh muscle, being careful not to hit bone. Thermometer should register approximately 185° when bird is done.

Cover with a loose cap of foil so it will not touch top or sides of turkey, pressing foil lightly at drumsticks and breast end. Do not add water or cover, and basting is not necessary. When bird is about ⅔ done, cut cord or band of skin at tail to allow heat to reach inside of thighs.

Tests for doneness: 185° on thermometer; thickest part of drumstick will feel soft when pressed between fingers; drumstick will move up and down easily and twist easily in socket.

HERB-SEASONED STUFFING
(for 16-pound turkey)

- 2 8 oz. bags herb-seasoned stuffing mix
- 3 to 4 cups celery, cut up
- ½ to 1 cup chopped onion, optional
- 2 cups sautéed sliced mushrooms
- Hot water, amount for desired moistness
- ½ pound butter (2 sticks)
- 1 cup snipped parsley

Sauté celery (and onion if used) in about half the butter until crisp-tender. Mix remainder of fat with some hot water; for a dry dressing, use just enough water to melt butter. Moisture from bird during roasting will provide some moisture. For a moist dressing, use up to 2 cups water, depending on moistness desired.

Combine stuffing crumbs, celery, onions, mushrooms, parsley, and butter-water mixture and toss lightly.

Photo: Reynolds Metals Company

Today's turkeys come stuffed or unstuffed, in all sizes, and they're one of the best meat buys on the market. Roast yours to a golden brown and serve it with pride on Thanksgiving.

VEGETABLE SCALLOP

- 2 packages frozen broccoli or asparagus spears
- 1 large package (1 to 1½ pounds) frozen onions
- 2 cans condensed cream soup–mushroom, celery or chicken
- Milk or Half and half
- 1 cup grated Cheddar cheese, if desired
- ½ cup toasted slivered almonds

Cook vegetables as directed on package. Arrange spears of broccoli or asparagus in a casserole with ends toward center. Place onions in center of casserole. Pour over vegetables the condensed soup diluted to a medium-thick cream sauce with milk or half and half. Sprinkle grated cheese over top, if used, and scatter almonds over top. Bake in a moderately hot oven (375° to 400°) until bubbling and brown.

MOLDED VEGETABLE RING

- 1 tablespoon unflavored gelatine
- ¼ cup cold water
- 1 cup boiling water
- ¼ cup vinegar
- 2 tablespoons fresh, canned or frozen lemon juice
- 1 teaspoon salt
- 1 cup celery, cut in strips
- ½ cup shredded cabbage
- ⅓ cup small cucumber cubes
- ¼ cup cold cooked green peas
- ¼ cup cold cooked beets, diced

Soak gelatine in cold water and then dissolve in boiling water. Add vinegar, sugar, lemon juice, and salt and mix well. Chill until slightly thickened and add remaining ingredients. Turn into a lightly oiled ring mold. Chill until firm. Remove to large platter, surround with crisp greens, and fill center with Horseradish Dressing.

To make Dressing, beat ¼ cup heavy cream until almost stiff and then add 3 tablespoons vinegar gradually, while continuing to beat. When stiff, add ¼ teaspoon salt, dash pepper, and fold in 2 tablespoons horseradish. Or, use your own favorite bottled salad dressing.

ORANGE FLUFF

- 1 package orange flavored gelatine
- 1 cup boiling water
- 1 6 oz. can unthawed orange juice concentrate
- 2 tablespoons lemon juice
- ½ cup sugar
- 2 teaspoons grated orange rind, if desired
- 2 egg whites beaten stiff
- 1 cup heavy cream, whipped stiff or
- 2 cups whipped dessert topping mix.

Dissolve gelatine in boiling water. Add unthawed orange juice concentrate, lemon juice, sugar and grated rind. Let stand until mixture thickens slightly. Fold in stiffly beaten egg whites and then the whipped cream or topping mix. Turn into a pretty glass bowl and chill. Top with whipped cream dollops studded with a thin orange half-slice and an orange slice twisted in center. Serves 6 to 8.

Freeze some leftover turkey for later use in Turkey a la King. Measure 1 quart medium-sized turkey pieces (4 cups) and place in suitable freezer container. Cover with cool canned chicken broth or consomme to keep turkey from drying out. Leave ½ to 1 inch for expansion; seal, label and freeze.

TURKEY a la KING

- 1 quart medium-sized pieces of turkey
- 3 tablespoons butter
- 1 cup fresh mushrooms sliced or 1 7-oz. can sliced mushrooms
- 1½ cups diced celery
- ¼ cup diced green pepper
- 1½ cups turkey or chicken stock
- 2 tablespoons butter
- ⅓ cup flour
- 1¾ cups half and half or rich milk
- 3 tablespoons diced pimiento
- Salt and pepper

Cook sliced mushrooms, celery and green pepper in the 3 tablespoons butter until crisp-tender. Melt 2 tablespoons butter, stir in flour and gradually add turkey stock. Cook until thickened with stirring. Add the half and half or rich milk, turkey, mushrooms, celery and peppers. Season to taste with salt and pepper and stir in pimientos. Serve over Chinese fried noodles, in patty shells, or over fluffy rice or baking powder biscuits. Serves about 10.

AROUND the HOUSE

Booklets You Might Like

"Winning Recipes"—20 pages of mouth-watering, easy-to-prepare recipes featuring Hunt's tomato sauces. For your free copy, write **Winning Recipes (P), Hunt-Wesson Kitchens, 1645 West Valencia Drive, Fullerton, Calif. 92634.**

"Do You Know How To Read A Handtag?" is available free of charge by writing **Consumer Information's Center, Maytag Company, Newton, Iowa 50208.** The handtag on a garment will tell you who manufactured it, the fiber content, fabric finishes, how to care for the garment and what to expect from it. The trick is to know just what these things mean, and this booklet will help you.

New electric trivet by **The West Bend Company.** Available in either avocado or harvest gold; uses controlled heat to maintain temperatures between 150° and 190°. Reaches prescribed temperature within three minutes. Retails for under $6 and is available at hardware and department stores.

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For free information on the windbreaker rally jackets, write to **Proto Tool Company, Jacket Program, Box 3519, Terminal Annex, Los Angeles, Calif. 90054.**

Fireplace Logs For Christmas

This project, of making "fireplace logs" from newspapers, should be started about two months before Christmas, since it takes time to process the logs. Besides plenty of newspapers, for five logs (which is about what one would make for home use, and the amounts can be increased in proportion if making some for gifts) you need the following:

150 sheets of newspaper, four pounds of blue stone crystals, four pounds of copper sulphate powder, and three pounds of rock salt. All these can be bought at the drug store.

To make a log, roll 30 sheets of the paper **tightly,** tie firmly around ends and center with very stout string. Next mix the chemicals in one gallon of water in a large keg or washtub and stir it well. If you use a keg, stand the logs on end, but if you use a washtub, lay them down. This is to thoroughly immerse the rolls in the mixture. The solution is strong, so be sure little children don't put their hands in it.

Every few days examine the logs and as they absorb the fluid, add water. A gallon of water added the second week usually takes care of absorption. At the end of the fourth week, remove logs and lay in heated spot such as storeroom, cellar, or furnace room — any warm place. When dry, logs are ready for use and will make beautiful fires in the fireplace.

Wrap the ones you give away in gay Christmas paper and tie with contrasting colored ribbon. All recipients will be grateful for this cheerful gift. — *Louise Price Bell*

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by Sally Goth

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by E. R. Eastman

The sales of "Journey to Day Before Yesterday" continue to be good because so many who have read it keep telling others about it. Young and old alike get a kick out of learning how their forefathers lived; and youngsters really begin to believe that Grandpa's stories "really happened."

For a copy of this nostalgic book, well-bound and illustrated, send check or money order for $7.30 (New York State tax included) to American Agriculturist, Book Department, Box 370, Ithaca, New York 14850.

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TSB TOUR

Winterizing Evergreens

by Doc and Katy Abraham

The way you take care of your evergreens now will determine how well they come through the winter. The number one killer of both established evergreens and newly planted ones is a dry soil. Evergreens do not winterkill from freezing. They are affected by dry winds and sunshine of the fall, winter and spring months. That's why it's a good idea to soak your evergreens thoroughly during fall months, before the ground freezes.

On hot, sunny winter days, the plants give off a lot of moisture. If the ground is frozen, water cannot be absorbed through the roots, so it must come from the plant foliage itself. This type of injury is called desiccation and is the greatest killer of evergreens. An evergreen against a white background of a house can be "burned" twice by the sun. The sun's rays are bounced from the white wall, hitting the evergreen from behind, as well as from the front.

When the foliage dries out, you may not notice the browning in winter, but in spring you get that ugly brown, scorched effect. Newly planted evergreens get burned worse, since they have poorly established root systems. Even mature evergreens dry out and winterburn, especially if they're in a windy spot.

What to do: 1. Soak the ground thoroughly. **2.** Apply mulch of sawdust, peat, compost, or cocoa bean shells. **3.** Provide a burlap screen for evergreens exposed to the wind; it's not necessary to wrap burlap around each evergreen. **4.** Resort to liquid plastic sprays known as anti-desiccants, which prevent moisture from evaporating from both narrow-leaved and broad-leaved evergreens.

American Agriculturist readers can get a free bulletin, "Make Your Evergreens Live Through Winter," by sending a self-addressed, stamped envelope to Doc and Katy Abraham, Box 370, American Agriculturist, Ithaca, New York 14850.

Deer Repellent

As soon as snow starts to fall deer can be counted on to visit chestnut, apple, and other fruit trees. You can keep them away from valuable trees by taking old bed sheets and cutting them into 2×4-inch pieces. Make little bags from them and place two or three moth balls inside each bag. These can be hung on small limbs by using clothes pins.

Moth balls are offensive to a deer's keen sense of smell, and their effectiveness lasts a month or two. High humidity slows down the evaporation; rain or snow has little effect on the moth ball's life. Game wardens say that April is the worst month for deer damage, but we've had them bother our trees earlier than this. Start making your moth ball bags from sheets now, before you forget.

Cut-Leaf Philodendrons

This number one vine sold by florists and used by home owners brings in many questions. One I get most often is, "Why won't the leaves split and develop those nice deep cuts?"

The answer here is a lack of light, poor soil, or insufficient water. Under low light, the new growth reverts to the "juvenile" stages, with spade-shaped, smaller leaves and without the deep cut. In the jungle, these plants develop cut leaves to prevent winds and rains from shredding them.

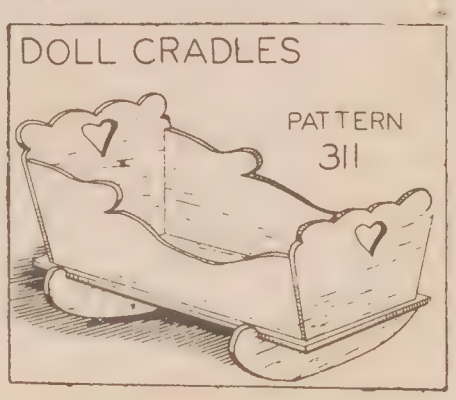
The common name for this large-leaved philodendron is Ceriman, but it is correctly called Monstera deliciosa. However, for years it has incorrectly passed for a philodendron and is sold by florists as Philodendron pertusum. It's doubtful if a name other than philodendron will ever be accepted, and for all practical purposes, who gives a hoot?

An indirect, bright light is best for this "philodendron" or Monstera. Keep it out of sunlight. Artificial light can be used, with a 150-watt lamp placed at least six feet away, or you can use a fluorescent light.

Grow the plant on a bark slab totem pole or moss stick. Cut off the snake-like aerial roots as they come out if you wish. These aerial roots are absorption organs which attach themselves to the pole. They can be removed by using a razor blade, sterilized in alcohol or hot water.

Note: Prune this plant periodically to get it to branch out and to control its height. **Don't wait** until it hits the ceiling to prune; cut out the top long before it reaches that stage. Root it in a jug of plain tap water.

Friends, it's a pleasure writing for our AA readers. We hope you'll drop us a note, saying how you like our service and how we can improve upon it.



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Pattern 311 gives actual-size guides for cradles 18, 8 and 4 inches long. Little girls love to rock their dolls in them, and grownups use them for servers, planters, or for holding fireplace wood. Pattern is 50 cents.

Send orders to American Agriculturist, Pattern Dept., P.O. Box 50, Windsor, New York 12550.

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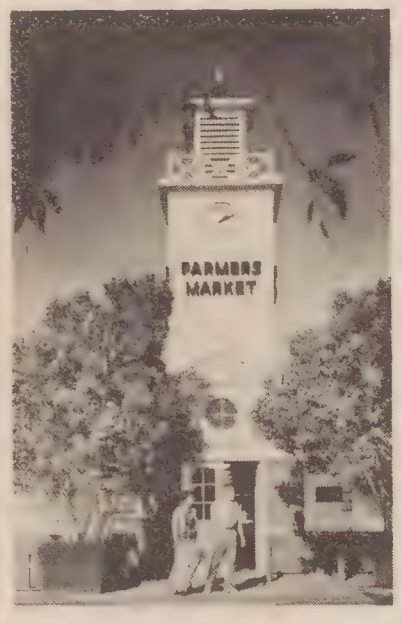

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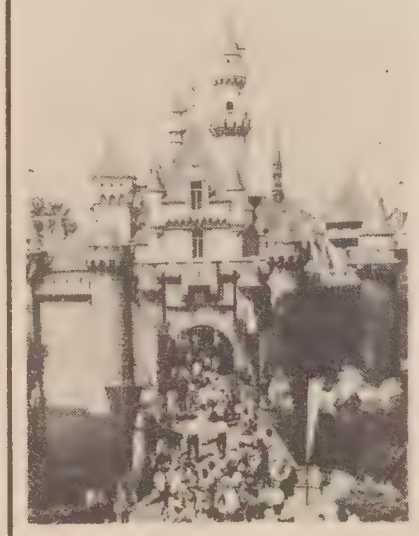
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Mrs. Augusta Chapman, Home Editor
American Agriculturist
Box 370, Ithaca, New York 14850

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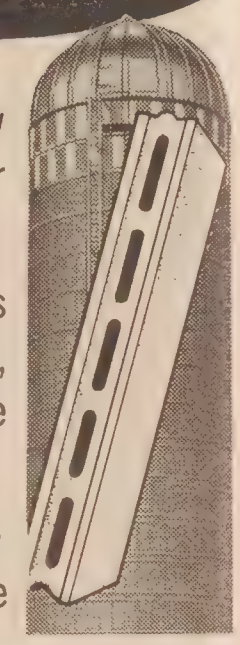

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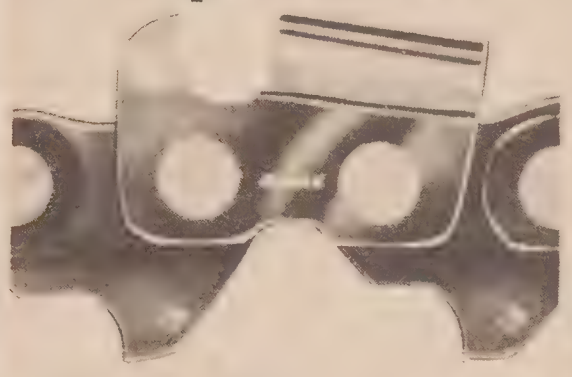

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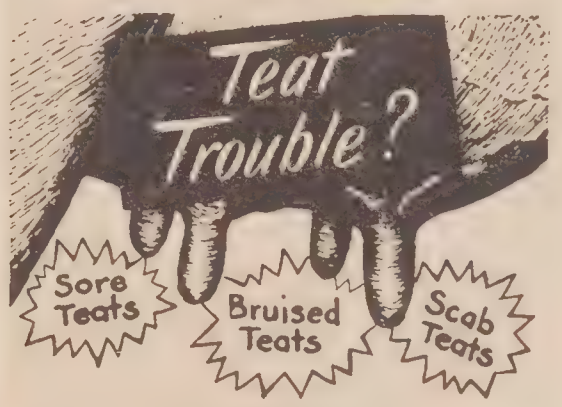

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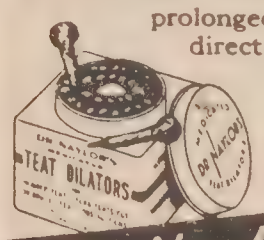

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AT HARDWARE & AUTO STORES

Dollar Guide

For The Northeast Farmer

USDA SECRETARY HARDIN has presented a series of "options" to the Congress concerning future farm policy. Included are commodity programs for wheat, cotton, and feed grains (with payment limitations to any one farmer) ... Class I Base Plan extension ... land retirement under several programs ... and help for 400,000 families having small, inefficient farms. Hardin sees his role as helping to evaluate alternatives, rather than pushing for specific legislation.

WHEAT is a good buy for livestock. For the first time in many years, wheat reached a point in 1969 when it sold at a lower price per bushel than corn. General recommendation is that wheat should not make up more than one-third to one-half of concentrate mixture for dairy cows.

CEREAL LEAF BEETLE, an insect pest invading the Northeast as it spreads from the Midwest, will not likely do appreciable damage until 2 or 3 years from now ... so comments Cornell entomologist Art Muka. He reports that a systemic insecticide that is applied to the seed of affected crops shows promise, but it is not yet registered for use.

SKIPS IN CORN STANDS can be caused by: planting too fast, planting too deep early in the season, wrong planter plate-size, worn "seed knockers" or seed-hopper springs in planter, or fertilizer burn. Observe this fall. Make plans to correct before next planting season.

U.S. DAIRY COW NUMBERS (12,700,000 last June) were lowest since 1887. However, U.S. milk production in August was up 1½ percent above August last year, first time in 25 months (with exception of 29-day February in 1968) that production was higher than same month in previous year.

ABOUT 58 PERCENT OF TOTAL U.S. apple production is expected to be marketed fresh, while about 40 percent will be processed. With controlled atmosphere storage, fresh marketing is a year 'round deal. Total crop is above last year's light crop, but not excessive ... and quality is good.

AMENDMENT THREE to the New York State Constitution provides for state policies that include "the protection of agricultural lands." Important for farm people to study this amendment and vote on it.

ORNAMENTAL HORTICULTURE is the largest off-farm agricultural occupation in Pennsylvania, employing more than 21,000 persons in some 1,400 companies. The business needs 800 new full-time employees each year, and 1,200 new part-time employees annually for the next five years. Opportunities abound for high school graduates to find employment in this vocation in the 68 communities where ornamental horticulture is taught.

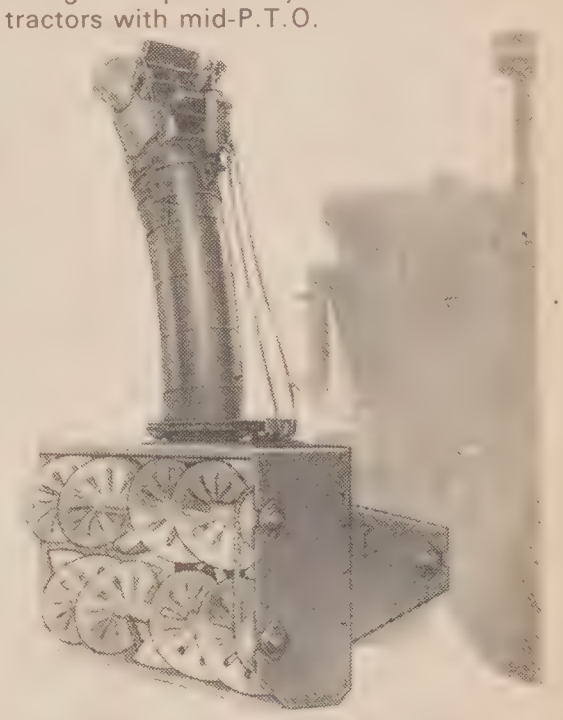
ON OCTOBER 1, a minimum wage law for Empire State farmers became effective. It applies to every farmer who paid cash wages of $1,200 or more in 1968. Basic minimum wage will be $1.40 from October 1, 1969 to February 1, 1971. After that it will be $1.50 per hour. There are some minor exceptions for workers paid for piecework, youths under 18, and handicapped persons. If you are covered, get complete details and study them carefully.

U.S.D.A. recently set a limit of 30 percent on the amount of fat in hot dogs and other cooked sausage products.

CORNELL ANNOUNCES DEVELOPMENT of a new high-quality lettuce named Ithaca. Field trials have given the highest percent of marketable heads of all popular varieties. It is tough enough to stand rough treatment while being transplanted. It is disease resistant. Not recommended for mid-season crop on muck because heads grow too big for packing in standard cartons.

Sno-Lander GETS RID OF SNOW... FAST

The McKee Sno-Lander Model 520
McKee Bros. Limited build a rotary snow plow to suit your tractor. Take your choice of rear mounted — 3 point hitch models or front mounted models including a unit designed specifically for John Deere tractors with mid-P.T.O.



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Cuts a full 7 feet (920 cuts a full 9'). Throw snow up to 60 feet. Handle any type of snow—wet, dry or frozen—load trucks too.

See your dealer for a model to fit your tractor — suit your job, or, write North America's Leading Manufacturer of Intermediate Range Rotary Snow Plows. We'll be happy to send you a colorful catalogue

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Ed Eastman's Page

AN IDEAL DIET

The late Ed Babcock, famous farm leader and writer, had much to say about what he called "animal diet," which consists of milk and its products, eggs and meat as a basis, supplemented by fruits and vegetables.

Ed pointed out that both farmers and consumers of the Northeast are fortunate, because those basic products are produced here. But unfortunately, not enough effort is made to keep our diet balanced by these high-quality food products. If one makes sure that he eats the above-mentioned foods, his diet not only will be balanced but will be attractive and taste good. The human being does best when he likes his food.

Cereals are all right as a supplementary food, but not as a main food. The place of cereals is best when converted by animals into human feed. For example, it takes six tons of corn to produce one ton of pork, and five pounds of grain to produce one pound of eggs. By eating these basic animal foods one does not only reduce the tonnage or pounds of food eaten, but he eats a much better quality adapted to human use. Therefore the cow and beef cattle are needed to convert cereals and roughage into milk and other dairy products, and, by the same token, the hen is needed to convert cereals into eggs and meat.

Another important point about animal diet is that it requires an immense amount of labor to convert cereals and roughage into animal products. This means high employment for millions of workers, a large factor in a country's prosperity.

Like almost everything else, good practices begin at home. Farmers themselves could greatly improve the quality of their diet by using more of the animal foods like milk, butter, cheese, eggs, and the meats.

TIME FOR A MEETING

I like to think of the farm family . . . father, mother, sons and daughters . . . as your farm and home board of directors. When any problem arises that affects the farm, the home, or any member of the family, you can call a meeting of your board to talk the problem over, giving each one the opportunity to take part and vote. As with the president in our government, the father and mother have the veto power.

I think you would be pleasantly surprised to find how this plan would increase the interest, particularly of the young people, in the farm and home affairs. It would also give them a feeling of sharing and responsibility.

This plan can be used with non-farm families also. I know a family where there are four children. The father calls the family together periodically to discuss and pass on the state of their finances and other problems . . . the use of television, who washes the dishes, who does the errands, who mows the lawn and cleans the sidewalks, who helps to get the meals, the time to go to bed, etc.

Because questions are settled in conference and by vote, there is little quarreling as to who does what.

This would be an excellent time to organize a family directors' meeting, because it will soon be time for making new plans and policies.

FLOWERS IN THE WINTER TIME

I can't remember a year that was better for flowers in this section than this year has been. The weather seems to have been just about right for them, and they have bloomed and bloomed profusely.

No country and no section in the north temperate zone has prettier flowers, or so many of them, as does the Northeast. But that is true only of our summertime. There is a long gloomy period here from November to April when there are no flowers.

My mother and thousands of other women offset our lack of flowers in the wintertime with house plants in the window. Mother's bay window was a joy to behold on a cold winter morning.

It is possible to have a wonderful display of flowers during winter by a window greenhouse. You can build or have a winter garden right in your living room that will add beauty and warmth to your home. Now is a good time to get started with one. For plants and ideas write to the floriculture department of your state college of agriculture or to Lord & Burnham, P. O. Box 114, Irvington, N. Y. 10533.

UNJUST AND UNFAIR

The attempt to boycott California grapes is one of the most unfair, unjust acts that has happened in agriculture in a long time. A labor union, named the United Farm Workers' Organizing Committee (UFWOC), has attempted for years to organize farm help, especially with fruit in California. Fruit farmers are particularly vulnerable, because fruit is perishable, and unless harvested immediately the farmer loses the results of a whole year's crop.

So far the labor union has failed to make much progress in organizing farm workers . . . so it turned to boycotting California grapes in the chain stores. In many cases misinformed people have joined to support the boycott.

Seventy-seven percent of California grapes are produced by small growers who employ little or no help. So, in order to win against a few large growers, the labor union would if it could ruin seventy-seven percent of the growers. Not only that, if the boycott succeeds it can be used against farmers everywhere, large and small, including dairymen.

Michigan State Senator N. Lorraine Beebe, chairman of the Consumer's Rights Committee, and an ardent representative of consumer's rights, warns: "If the grape boycott succeeds, it will bring an all-out attack on the American food market by boycott forces."

The Senator says that such action will be backed by "a completely false propaganda campaign", and that housewives will be "subjected to more of the same sort of arrogant tactics that the grape growers and workers have experienced." Her consumer committee believes that there should be national legislation.

If you want to protect your own business and help prevent a great wrong, write to the Consumers' Rights Committee, 910 Seventeenth Street, N. W., Room 901, Washington, D. C. 20006 (See page 10 of October issue).

ORDER NOW

If you want something good to read for long winter evenings, something for a grand birthday or a Christmas present, something that will recall good times that were and will never be again, then get E. R. Eastman's book, "Journey to Day Before Yesterday."

But if you want it for a Christmas present, order it now, because it takes a long time to get your order processed and through the mails, and Christmas will be here before you know it.

To get a copy write to American Agriculturist, Department Book, Savings Bank Building, Ithaca, New York 14850. The price is $7.30, including tax. M.E.R.

COWS CAN BE "ORNERY"

Born and brought up with dairy cows, I think I know them pretty well. But I had to learn the hard way.

Years ago, when I was operating a 40-cow dairy farm on shares, I was trying to drive a cow from the barnyard into the stable. Every time I got her up to the door, she turned and dodged off sideways, and I guess I must have spent fifteen minutes trying to get the brute into the stable. All of you dairymen have had similar experiences.

Finally, at the limit of my patience, I upped with a stone and threw it with all of my might. Fortunately, it didn't hit her, but in throwing it, I lost my balance and fell, hitting my kneecap on a stone. In the many years since, every time I see or feel the bunch left on my knee, I am reminded that throwing stones at cows or pounding them with a milking stool is a poor way to get them to give down their milk.

Still, there have been a few times since when I have lost my patience and temper with cows for, like some humans, they can be most obstinate, ornery, disagreeable creatures. On the other hand, they can be gentle, lovable, and affectionate.

EASTMAN'S CHESTNUT

Some friend sent me two typewritten sheets filled with good Chestnuts. Unfortunately I lost his name so I can't give him credit. If he sees this and will write me, I would like to say "thank you". Here's one of his best:

"A former pupil of mine who had become a principal told me this one. When he went home for lunch, his landlady said that she wanted to go to a neighboring town to shop that afternoon, but could not leave her preschool daughter Mary. He replied that that presented no problem; he would take Mary to school, and one of the high school girls would take care of her in the study hall. The girls would love it, and he had his classes in the study hall so he would keep his eye on her.

"Finally his plan was accepted. Soon after he began his class Mary talked out loud. Going back he explained that we do not talk out loud in school, but whisper. After a few minutes it happened again, and he told Mary quite firmly not to talk out. When it happened for the third time he had to stop his class. This time he made it emphatic. Retorted Mary, 'I notice you keep your yap going most of the time!' "

SERVICE For The Northeast Farmer BUREAU

by M. A. Parsons

SERVICE BUREAU CLAIMS RECENTLY SETTLED

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Mrs. Louis A. Stilwell, Interlaken (refund of down payment)	$ 5.55
Mr. Ray Houghton, Great Valley (refund on plants)	5.25
Mr. Albert Young, Arkport (refund on chicks)	41.00
Mr. Robert Bushman, W. Henrietta (refund on chicks)	80.00
Mr. Le Roy N. King, Morrisonville (refund on book)	5.00
Mr. George E. Besley, Beaver Dams (refund on subscription)	3.00
Mr. Fay Shetler, Parish (gas tax refund)	78.06
MAINE	
Mrs. Colby Whitcomb, Belfast (unfilled order)	18.00
Mr. Bernard A. Newbert, Waldoboro (refund on roses)	4.95
VERMONT	
Mrs. Helen Libby, Barton (refund on uniforms)	8.58

ILLEGAL

Since October 1, it has been a misdemeanor, in New York State, for anyone to misrepresent the true mileage of a car by altering the odometer, which registers the mileage. Also, when a car is sold, the seller must enter on the bill of sale or other paper the mileage appearing on the odometer at that time. If the seller knows the car has travelled more than is shown, he must indicate "true mileage unknown."

This new law was recommended to the New York State Legislature by Attorney General Lefkowitz who said: "Tampering with mileage indicators is an outright fraud on the consumer and tends to mislead a purchaser into thinking a car is in good condition, when, in fact, it may be in such bad working condition it might be the cause of an accident."

POSSIBLE REWARD

"I want to report that I just had ten of my best hens stolen. I am a subscriber member, so thought I would let you know."

We offer a $25.00 reward to the person who gives information leading to the arrest, conviction and imprisonment for at least 30 days of anyone who defrauds, steals from, or commits arson against a subscriber.

Payment of the reward is subject to the following rules:

1. The act of fraud, arson, or theft must be committed against a subscriber who has a Protective Service sign prominently displayed.
2. Claim for a reward must be made promptly within 30 days after conviction.
3. Conviction must result in a jail sentence of at least 30 days. No reward will be paid if sentence is suspended or the culprit is paroled.
4. The reward does not necessarily go to the person against whom the crime is committed nor to a subscriber.
5. The reward will not be paid to law enforcement officers.
6. The reward will not be paid in the case of theft from commercial concerns, only from farms.

We have asked our subscriber to let us know if the thief is caught and the above conditions are met.

AVAILABLE

The Bureau of Consumer Frauds and Protection of the New York State Department of Law has speakers available and a documentary film, "The Fine Art of Fraud."

Any group wishing to show the film or have a speaker address their meeting may write to Charles W. Stickle, Executive Assistant to the Attorney General, 80 Centre Street, New York, New York 10013.

NOT VALID

"A salesman called on us the other day and tried to sell me a set of books. I was not interested, but could not get him to leave. Finally, I went out to gather eggs and left him still talking with my two daughters, aged 11 and 15.

"When I returned to the house, I found that the girls had gathered up $5.55 between them. They had signed an order and had given him the money as a deposit on a $19.95 set of books. Do you think you could get this order cancelled and get their money back?"

We have a copy of the order, which stated: "This is an absolute order. There are no conditions nor verbal agreements concerning it."

Ordinarily, if a person had signed such an agreement, there would be nothing we could do. Fortunately, however, in this particular case we were able to get a refund because the girls were minors and this was not a valid contract.

ADDRESSES WANTED

Mr. Eugene Heine, who was teaching in Pennsylvania when last heard from.

* * *

Descendants of Samuel Mallery, whose son Rufus was U.S. Senator, and whose daughter, Maria Tresha, married a Slocum.

* * *

Mrs. Meda Pendleton, formerly of Susquehanna, Penna.

* * *

Descendants of Annie Durst or Durot of Saratoga, N.Y.

* * *

Descendants of Minis and Etta Hoyt Barber, who lived near Delhi, N.Y. They moved to Grahamsville and then to the Willowemoc or Debruce area.

Loses control of SNOWMOBILE Hits snowbank!

Joseph B. Greene II of Oakfield, N.Y. was seriously injured when he lost control of his snowmobile. Back injuries put him in the hospital for 12 days. Here local agent, Lock Norton of Elba, N.Y. delivers check for medical expenses and weekly income of $1304.29. Mr. Greene writes:

"I would like to thank you for your promptness you showed us in paying my insurance claims this spring when I was injured in a snowmobile accident. Thank you again."

Joseph B. Greene II

OTHER CLAIMS PAID
A friend's name may be in this list

Lowell R. Smith, Fillmore, N.Y. Hit by bowling pin—broke tooth	$ 400.00
George M. Davis, Lisle, N.Y. Fell on ice—inj. shoulder	100.00
Richard Secoolish, Chenango Forks, N.Y. Fell from roof—mult. inj.	387.84
Millard C. Law, Franklinville, N.Y. Fell on ice—broke ribs	145.70
Tim Laverne Marble, Freedom, N.Y. Hit tree sleding—broke wrist	110.00
Harry Ackley, Gowanda, N.Y. Snowmobile acc.—broke collarbone	180.00
George Merrill, Cato, N.Y. Auto acc.—mult. injuries	1186.91
Floyd Wood, Scipio Center, N.Y. Fell on ice—broke hip	690.00
Gloria M. Arnold, Dewittville, N.Y. Snowmobile acc.—broke leg	1300.00
Blanche Tarr, Gerry, N.Y. Fell on ice—broke arm	153.00
Harold B. Shafer, Pine City, N.Y. Slipped on ice—injured back	1541.00
Floyd Blanchard, Smyrna, N.Y. Fell off snowmobile—broke wrist	147.14
William K. Ashline, Plattsburg, N.Y. Thrown from snowmobile—mult. inj.	828.35
Leonard G. Gadway, Mooers Forks, N.Y. Snowmobile accident—inj. shoulder	244.29
Dan Weddle, Homer, N.Y. Snowmobile acc.—broke pelvis	445.40
Wallace Burnett, Homer, N.Y. Caught in snow blower—inj. hand	432.14
George Meeker, Hancock, N.Y. Auto acc.—broke ribs	276.42
Thomas R. Tripp, Dover Plains, N.Y. Fell on ice—broke wrist	227.35
Donald N. Koch, Lawtons, N.Y. Auto acc.—multiple injuries	380.31
Harry Hollenbeck, Johnstown, N.Y. Fell on ice—concussion	132.86
James T. Cranston, Basom, N.Y. Snowmobile acc.—broke leg	763.06
Deborah A. Cole, Newport, N.Y. Fell off horse—inj. head	219.00
Alice M. Barnum, Carthage, N.Y. Crushed by cow—broke ribs	198.56
John A. Petrus, Watertown, N.Y. Snowmobile acc.—inj. shoulder	107.14
Delilia Gorczyca, Turin, N.Y. Slipped on ice—strained back	287.85
Stanley Maciejko, Jr., Turin, N.Y. Skiing—broke collarbone	112.43
Robert Grimmer, Castorland, N.Y. Fell off snowmobile—broke arm	108.21
Cecil Bloss, Carthage, N.Y. Thrown off snowmobile—broke rib	120.00
Sally Matuszczak, Lowville, N.Y. Hit by snowmobile—concussion	355.79
Carlton E. Maine, Jr., Hamilton, N.Y. Truck acc.—inj. abdomen, leg	1177.14
Thomas C. Hayduke, Madison, N.Y. Snowmobile acc.—broke nose	90.00
Walter Hamilton, Honeoye, N.Y. Slipped on ice—broke hip	989.85
Nellis Gray, St. Johnsville, N.Y. Slipped on ice—internal inj.	$ 930.25
Bessie B. Smith, New Hartford, N.Y. Auto acc.—multiple injuries	760.00
Samuel Pitcher, Sr., Warner, N.Y. Ditch caved in—inj. back, shoulder	329.55
Robert Elwin Enos, Stanley, N.Y. Slipped on ice—inj. back	120.00
Pauline T. Carson, Geneva, N.Y. Fell on ice—broke wrist	388.23
Paul Szeflinski, Richfield Springs, N.Y. Slipped on snow—injured back	120.00
Alan J. Ostrander, Canton, N.Y. Snowmobile acc.—injured leg, knee	218.56
Charles K. Stickney, Brasher Falls, N.Y. Thrown from snowmobile—broke collarbone	511.41
Douglas Eakins, Potsdam, N.Y. Snowmobile acc.—broke leg	238.56
Timothy Smullen, Cobleskill, N.Y. Snowmobile acc.—cut head, concussion	167.14
Jennie Loucks, Schoharie, N.Y. Fell on ice—inj. shoulder	312.87
Alice Bergstrom, Jefferson, N.Y. Fell off snowmobile—broke rib	190.00
Wm. Kelsey Hill, Avoca, N.Y. Slipped on ice—inj. knee	579.69
Douglas Aman, Candor, N.Y. Playing hockey—broke wrist	171.25
Arlyn Rounds, Ithaca, N.Y. Slipped on icy wood—inj. leg	170.10
Eleanor Nobles, Groton, N.Y. Fell on ice—injured back	125.72
Edith Powell, Gardiner, N.Y. Fell on ice—broke wrist	337.43
William C. Dickinson, Walworth, N.Y. Snowmobile acc.—broke foot	200.00
Melville E. Ameele, Walworth, N.Y. Snowmobile tipped over—inj. shoulder	290.50
Edith H. East, Palmyra, N.Y. Fell on ice—broke arm	128.56
Janice Stone, Newark, N.Y. Riding on snowmobile—cut knee	686.46
Lester Gardner, Altona, N.Y. Riding snowmobile—cut knee	439.29
Roger G. Cooney, Williamson, N.Y. Thrown from snowmobile—broke shoulder	300.25
John Siler, North Java, N.Y. Slipped on ice—injured back	134.27
Miles French, Athens, Pa. Slipped on ice—injured shoulder	127.00
Raymond Rutledge, Honesdale, Pa. Dropped snow plow—broke toe	155.71
Bernice M. Hixson, Belvidere, N.J. Fell on ice—broke leg	121.43
George Longstreet, Wrightstown, N.J. Fell on ice—broke pelvis	1126.45
Claude Mumblo, Sunderland, Mass. Fell on ice—broke hip	1000.00
Robert B. Lovejoy, Springville, Me. Skiing—broke leg	234.28
Doris C. Reney, Grantham, N.H. Fell on ice—broke wrist	204.21
Carroll A. Douglas, No. Ferrisburg, Vt. Fell on ice—broke hip	1310.00

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here they are: the new 70's

▣ AUTUMN COLORS, fervent harvest preparations and the crisp, clean air in the morning are the typical, almost idealistic signals of the fall season. And just about every one of those descriptions has been used to describe another sure sign of the fall—the unveiling of the new model cars and trucks. For some of you, it means the old car or pickup is another year older and maybe high time to shop for a new one. For others, it may mean the decision to invest in a new heavy-duty truck to ease the farm workload, or maybe a camper or van for more fun with the whole family. What a choice there is!

In 1970, there are more models, more options and more safety features than ever before. They come in all sizes—from luxurious big cars to the economical compacts. Oh yes, and don't forget the intermediate sizes, too. Some of the new models are designed for the new generation of sports-minded drivers, and others are designed for those who are young at heart. Manufacturers are giving the customer his free will to design his own car from the basic model—with almost countless options.

With increased emphasis on safety, many new cars will have such features as special child safety seats, improved lap and shoulder belts, along with energy-absorbing bumpers and greater body strength to protect passengers.

To prevent those irritating little scratches, there will be options on chrome trim and flashy vinyl side moldings to guard against the banging-door scratches.

No matter what you're looking for, even if you're just a bit interested, here's the place to start. Just look over this sampling of new autos and trucks to start picking the one that fits you best. Then next time you're in town, drop in at the local showrooms and kick a few tires. "The choice of the lot is yours"—here they are: the new 70's.

Monte Carlo joins the new car scene for the first time in 1970 as one of seven CHEVROLET lines.

BUICK enters the full-sized station wagon field with the Estate Wagon. It features greater load capacity.

Four models will be offered in the Delta 88 series from OLDSMOBILE, including the Holiday Sedan, below.

LINCOLN-MERCURY will offer the Monterey, above, as one of three basic models in the medium-price range, along with the Marquis and the Marauder.

FORD Ranchero reflects the increased emphasis on personal and recreational uses for light trucks. It's more "car-like" than ever before, with longer, lower lines, wood paneling on the Squire.

JEEP Gladiator truck buyers now have a choice of two high-efficiency engines—the 350 cubic inch, 230-hp "Dauntless" V-8 or the 145-hp "Hi-Torque" OHV 6-cylinder engine.

The CHEVROLET ½-ton Fleetside pickup will come equipped with wider rear treads for better clearance and improved stability, glass-belted tires for longer life.

Economical luxury is the slogan for the 1970 DODGE Polara series. With its longer hood and shorter rear deck, it has a longer, lower look. And for a smoother ride, there will be a new Torsion-Quiet suspension system.

Available in an economical 6-cylinder or high-performance V-8, AMERICAN MOTORS has entered the 1970 season with its all-new compact—the Hornet.

PLYMOUTH has expanded its Fury line with a whole host of options in body and engine design, including the Fury III hardtop at right.

LTD Brougham accentuates the more formal grille, ornamentation and rear-end design common to all 21 FORD models for 1970.

A standard feature on all CHRYSLER models is the new sound and vibration isolation system for a smoother, quieter ride. Newport Custom is one of the series.

PONTIAC's muscle car GTO comes equipped with 400 cubic-inch V-8 engine, fiberglass-belted tires and the energy-absorbing Endura bumper.

The DODGE truck lineup is highlighted by major engineering and styling changes. The fashionable Adventurer leads the line with passenger car styling and convenience.

A brand-new, multi-purpose utility and recreation vehicle from GMC is the Jimmy. The truck features 4-wheel drive and optional removable fiberglass top.

INTERNATIONAL Loadstar 1600 is a medium-heavy-duty truck available with gasoline, LP-Gas or diesel-powered engines. For maximum efficiency, there is a wide choice of wheelbase dimensions.

On the move: New Chevrolet Movers for '70.

Chevy goes heavy! New Titan 90. Anybody can add a new truck to a lineup. Leave it to Chevy to add a truck and a half.

Titan 90.

Never before has a Chevy tilt been so long on muscle.

So right for turnpike stretches.

With 9 diesels available to put under the driver at the wheel.

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And a wraparound instrument panel that puts everything just a glance or fingertip away.

Conventionals. Vans. Recreational vehicles. Whatever you're thinking, your Chevrolet dealer's got it. And it's a Mover.

Chevy goes lively! New '70 pickup. The first thing a Chevy pickup has to move is you. And we never forget it.

It shows in the way our '70s look.

In their coil spring smoothness. Car-like option lists.

And all the different ways they come: Fleetside, Stepside and Longhorn camper (the second car that doubles as a second home).

Chevy goes anywhere! New Blazer. Call it Chevrolet's convertible-station wagon-car-truck if you've got the time. Or just call it Blazer for short.

Order it with removable hardtop. Two- or four-wheel drive for telling trails to get lost. That's Blazer. The runabout with the largest V8s, widest track and roomiest interior.

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Northeast
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DECEMBER 1969

American Agriculturist
and the
RURAL NEW YORKER

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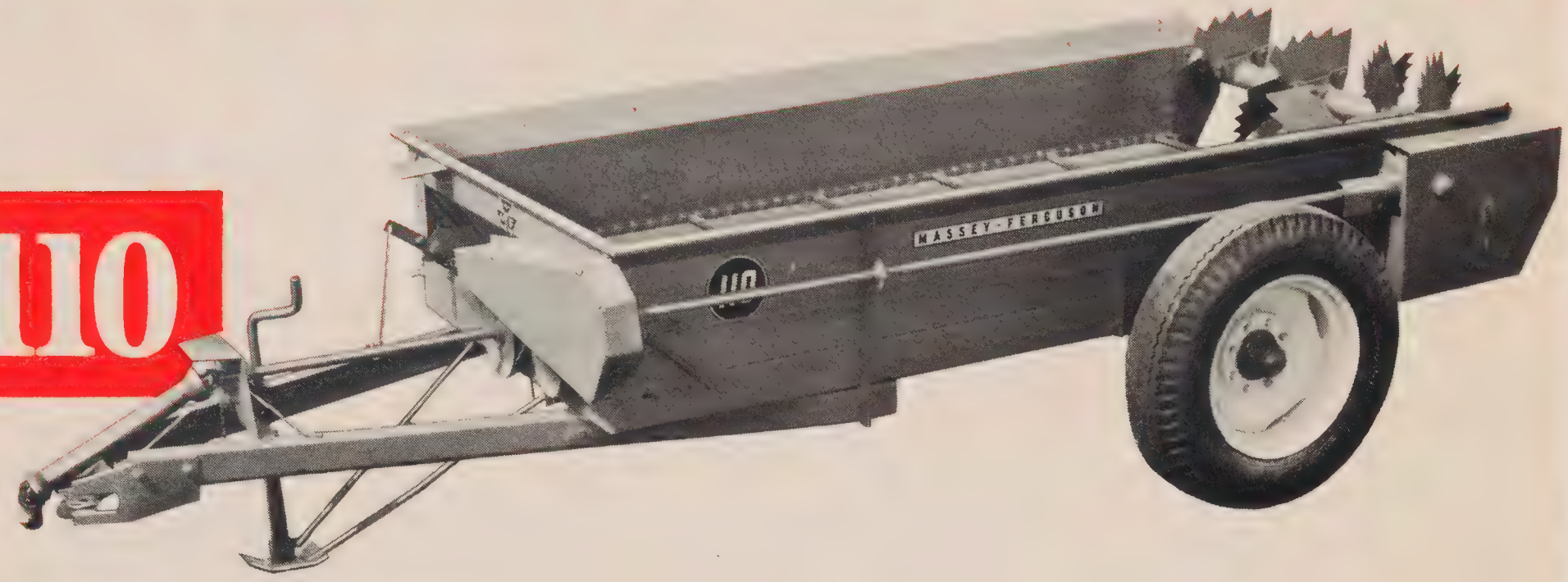

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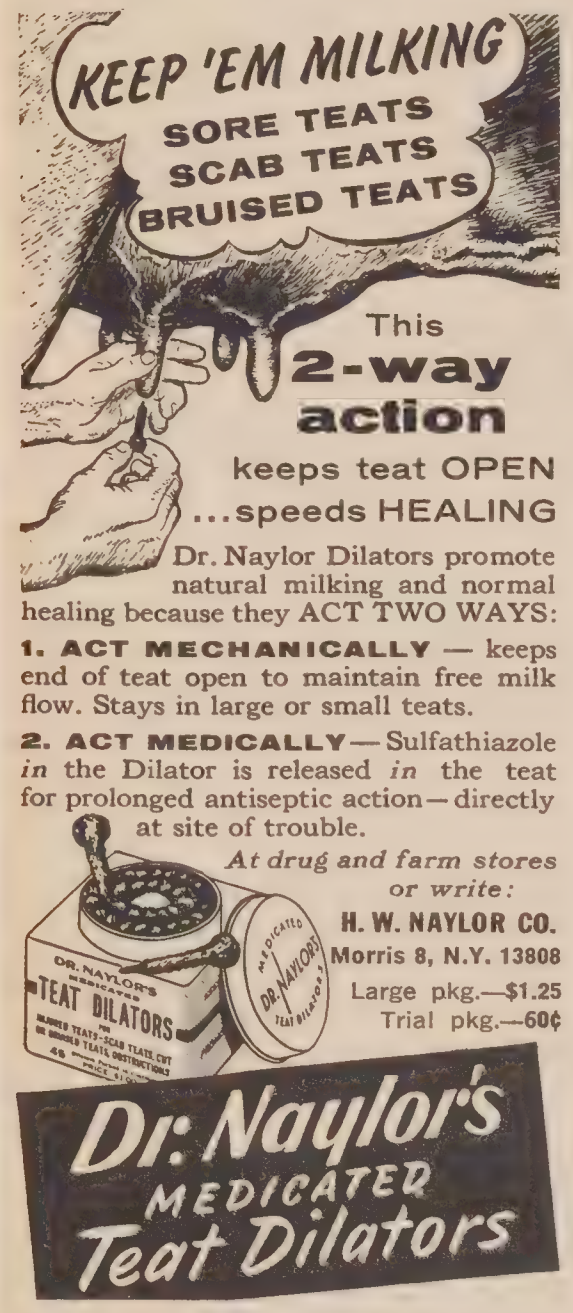

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American Agriculturist and the RURAL NEW YORKER

For The Northeast Farmer

Vol. 166, No. 12

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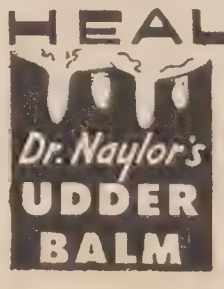

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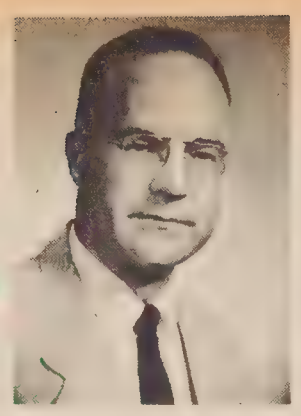
EDITORIALS



by GORDON CONKLIN

MILK MOVES

There have been several steps taken by northeastern dairy cooperatives lately that I think point in the direction of constructive change. We would debate, I suppose, the specifics of the changes . . . and find some cons as well as pros . . . but it seems to me that the **principles** make sense.

First of all, the Dairymen's League Cooperative Association has become the Dairylea Cooperative, Inc. . . . reflecting an increased consumer orientation in an industry that is traditionally production-oriented. Only time will tell whether all the details were handled just right, but I'm convinced that the **principle** of looking beyond farm line fences to the consumer is a must for all farm organizations, especially marketing ones. The name-change, along with advertising revamping and a new array of product packaging, indicates the sensitivity of Dairylea leadership to the requirements of successful merchandising.

Secondly, the delegates to the last United Farmers of New England annual meeting voted mandatory contributions of up to five cents per hundredweight from 1,400 cooperative members . . . the money to be used for milk promotion. We can nit-pick over the fine print, but I'm convinced that:

1. Effective milk promotion is essential to the future of the dairy industry.
2. Promotion programs will not reach full potential until mandatory contributions are achieved.

Finally, I note that 20 milk cooperatives . . . representing 27,000 producers . . . are now members of the New York-New England Dairy Cooperative Coordinating Committee. The most recent cooperatives joining are from western New York . . . Upstate and Genesee Valley.

The fragmentation of dairymen into small . . . and sometimes bitterly competing . . . groups has always worked to their economic disadvantage. The wave of the future is toward consolidation of cooperatives, just as it has been . . . and will be . . . consolidation of farms.

Along this line, I'll make the flat prediction that within the next 20 years Dairylea and Eastern Milk Producers will be joined in one organization. If you find that hard to believe, let me remind you that the American Agriculturist and Rural New Yorker are now one publication!

DEAR VIRGINIA

You wrote me asking whether there is a Santa Claus.

Well, the answer is yes and no. Please don't tune me out . . . as your generation so often tends to . . . until you've heard some of my reasons for giving such a seemingly evasive answer.

There is no Santa Claus in the sense that you are I can get something for nothing. Being human, we tend to kid ourselves with visions of sugar plums pouring forth from some magic storehouse overseen by "the government." But you and I, and our neighbors, are the only sources of goodies that "the government" has. If I get more of those goodies than I deserve, then it's my friends and neighbors that I have cheated.

It's my personal conviction that people who dream constantly of a Santa Claus . . . be it in the form of some juicier government program, or a rich aunt who'll hopefully die soon, or an unjustified lawsuit against someone for a supposed injury, or whatever . . . are not in tune with reality. The Good Book had it right, I believe, when it recorded words to the effect that our abundance is measured with the same ladle we use to give of ourselves.

There's a bit of larceny in all of us, I suppose, and so . . . consciously or unknowingly . . . we try to get all the benefits of our society and at the same time make the smallest possible contribution to it. The happiest people, though, are the ones who are fully creative and productive . . . not the ones who seek pity by being pitiful.

Yes, there is a Santa Claus . . . because generosity and good will prevail, to one degree or another, in the hearts of people all around you. The cynic will scoff at such a statement, but that's because he is oblivious to the plus side of human nature that is expressed so often in the lives of everyday folks up and down the highways and byways of the land.

The spirit of Santa Claus is tinsel and gaily wrapped gifts, but it's much more than that. It's also the parents who rise with the dawn for 30 years so their children can go to college . . . it's the housewife who cheerfully endures chores on behalf of her family . . . it's the people who glue our society together by their unselfish service to community organizations . . . it's the friend who helps us through the valley of the shadow when at times we'd rather quit and stay right there. Giving has many forms, and even the Christmas gift with the highest price tag costs far less than the sacrifices that people make for each other.

As long as such things endure . . . and as long as children gaze with starry eyes at lighted Christmas trees . . . there will be a Santa Claus. He will not fulfill our dreams of accumulating baubles, though, for his mission is to warm our hearts.

A joyous Christmas to you and yours!

HOOKER LOOKER

Some time ago, I had the opportunity to visit with an executive of the Coca-Cola Company. He told me that when his organization's low-calorie drink first came on the market, sales didn't go very well.

While brainstorming the problem one day, one of the think-tank crew suggested adding caffeine to the low-calorie drink . . . something that had always been done to the regular Coca-Cola. No sooner said than done . . . and sales of his diet drink zoomed!

Now caffeine doesn't enhance the taste of anything . . . in fact it s presence is undetectable by taste in this instance . . . but it is a stimulant, revving up the mechanism for more excitingly burning life's candle at both ends.

Why, I mused later, can't the dairy researchers consider some "hook" like caffeine for certain milk drinks, and perhaps other elected dairy products?

The dairy industry's competition can move quickly to profitably sell caffeine by the carload . . . while farmers are stuck with endlessly repeating that ancient slogan, "Milk is nature's most perfect food." Granted, the low-calorie inventors are now hung up on the cyclamate scare, but I predict they'll turn to some substitute for the substitute!

People do not live by bread alone . . . or even by food alone. There are a heck of a lot more things to consider in selling milk than just its food value!

POLICEMEN, NON!

There has to be a lesson somewhere in that business at Montreal awhile ago when the police went out on strike. Big cities don't like guns in the hands of the citizens . . . so, with the police on strike, about the *only* folks with guns were the criminals!

They did right well, too . . . robbing banks and looting stores . . . until the troops took over and restored order.

The anti-gun people have been claiming that the millenium would arrive if guns were restricted to peace-keeping forces. But in our times, the police of most any city may decide to stay home to push for more pay . . . and then the disarmed populace is really at the mercy of the gun-toting lawbreakers. Any vigilante attempting to maintain order would probably not only be breaking the municipal gun laws, but would also be committing the unforgiveable sin of operating as a "strikebreaker!"

I hope that rural people are never similarly disarmed!

A ROCK AND A HARD PLACE

Our nation recently reached the point where more than half of all workers are employed in service industries. It was also only recently that the poli tical power of America moved sharply toward suburbia and the cities . . . where 70 percent of our population is crammed on 1 percent of our land area.

These trends have resulted in a situation where more and more decisions "in the public interest" are being made by people having little or no direct relationship to basic **production.** This in turn explains that the confines within which the technicians are being forced to operate seem to be constantly narrowing.

"Produce abundant (and cheaper) power," the electric company engineers are instructed, "but don't put heat from nuclear reactors into lakes, and don't mess up the landscape with those horrid old power lines!"

"Produce more (and cheaper) food for us and the world's hungry," farmers are told, "but go easy on the pesticides and fertilizer . . . and cork all that livestock so manure won't pollute anything!"

"Build jetports for the future," is the cry, "but don't put 'em anywhere near any house . . . or alligator!"

"Build more houses for our growing population . . . but don't cut any trees from the beautiful forests," so goes the report by the public-poll expert on what sixty percent of the people want.

The majority of our nation's population has only the foggiest notion about how the goodies they consume in such enormous quantities are **produced.**

Thus, the body politic tends to put the production people between a rock and an increasingly hard place!

Of course, production isn't everything . . . **but lack of production isn't anything!**

How to buy a boot

TINGLEY

TINGLEY RUBBER CORPORATION, 222 SOUTH AVE., S. PLAINFIELD, N.J. 07080

WHERE TO BUY A BOOT

NEW YORK

ADDISON Addison Agway
AFTON Jenks & Swart Dept. Store
AKRON Akron Branch of Batavia Agway
ALBANY Albany Agway Farm Store
ALBION Chauncey De Luca; Ralston Purina Co.
ALEXANDER Gephart & Shaw
ALTAMONT Altamont Agway
AMENIA Dutchess Surplus Store; Wilson & Eaton Co.
ANGELICA Gorton's Store
ATTICA A. E. Young
AUSABLE FORKS National Army Stores Corp.
AVON Agway Coop, Inc.; Zingerella's
BALLSTON SPA A. L. Pettit & Son, Inc.
BAINBRIDGE New Holland Supply; Charles H. Eldred Co.
BATAVIA Batavia Agway
BATH Bath Agway; Orr's Shoe Store; M. J. Ward & Son
BINGHAMTON Binghamton Agway; Norman Uniform Co.
BLISS Moden's Store
BRIDGEHAMPTON, L. I. Bridgehampton Agway
BUFFALO Brownie's A & N Store
CALEDONIA Wm. Hamilton & Son
CAMDEN Camden Agway
CANANDAIGUA C. Outhouse Feed & Coal; Joe Valvaros Dry Supply
CANISTEO Canisteo Agway
CASTILE Agway Service
CATSKILL A. R. Jones & Son
CENTRAL ISLIP, L. I. Central Islip Agway
CHAMPLAIN Pearl's Dept. Store
CHATEAUGAY Pearl's Dept. Store
CINCINNATUS Jacksons Dept. Store
CLAVERACK Claverack Agway Farm Store
CLINTON Clinton Agway
COBLESKILL Cobleskill Agway
CUBA Cuba Shoe Shop
DANSVILLE Dansville Farm Supply; Perry Shoe Service
DELHI Delhi Bootery
DUNDEE Dundee Agway
EAGLE BRIDGE H. P. Hood & Son
EAST AURORA Village Plaza Shoe Repair
EAST CONCORD Shamel Milling Co.
ELLENBURG DEPOT Pearl's Dept. Store
FAIRPORT Fairport Agway
FALCONER George's Shoes
FILLMORE Fillmore Feed Service
FINDLEY LAKE Luke's Apparel
FLORIDA Steven's Dept. Store
FORT EDWARD Adirondack Farmers Coop.
FREDONIA C & E Grape Growers Coop. Assn, Inc.
FREWSBURG Moore's Hardware
FULTON Fulton Agway
GENEVA Agway Corp.; E. E. Miller & Son
GOWANDA Himelein & Co.
GREENE Greene Agway; Miller Shoe Store
GREENWICH Greenwich Agway Farm Store
HANCOCK McGranaghan Co.
HERKIMER Agway Corp.
HERMON Pearl's Dept. Store
HILTON Agway Coop, Inc.
HOLCOMB Holcomb Agway
HOLMESVILLE Herb Reed
HORNELL Jacobs Bros.; La Piana Shoe Store
HORSEHEADS Horseheads Branch of Elmira Agway
ITHACA Ithaca Agway; Sturm Bros.
JAMESTOWN Arcade Shoe Store; Brown-Bilt Shoes; Garnahan's; Herbert's Shoe Store; Martino Shoe Shop; Ross Shoe Store; Siegel's Shoes; Stone's Shoe Store
JASPER Paynes General Store
JOHNSTOWN Johnstown Agway
KENNEDY Kennedy Super Market
KNOWLESVILLE Agway Corp.
LIBERTY Sullivans
LINWOOD Agway Corp.
LITTLE FALLS Rock City Agway
LITTLE VALLEY Gramco, Inc.
LIVONIA J. C. Monte
LOCKPORT W. H. Rhinehart, Inc.
MALONE National Army Stores Corp.
MARATHON Marathon Agway
MARHLA G. C. Monchow
MASSENA National Army Stores Corp.
MELROSE Calhoun Equipment Co.
MILLERTON Millerton Agway
MONTGOMERY Montgomery Agway
NEW BERLIN I. L. Richer Co., Inc.
NEWBURGH Devitt's Agway Store
NICHOLS Nichols Agway
NORWICH Rappaport A & N Store
NUNDA Nunda Farm Service
ODESSA Odessa Agway
OLEAN Lester's Shoe Store
ONTARIO Herrmann's Agway
OSWEGO Oswego Agway
OWEGO Owego Agway
PALMYRA Palmyra Agway
PENN YAN Penn Yan Agway
PERRY Perry Agway
PHELPS Agway Corp.
PORT JEFFERSON, L. I. Port Jefferson Agway
POTSDAM National Army Stores Corp.
RICHFIELD SPRINGS Ray E. Brown
ROME Herb Philipson
RUSHFORD Bob's Dry Goods Store
SALAMANCA Mason's Shoe Store
SALEM Ondawa Agway
SARANAC LAKE National Army Stores Corp.
SCHENECTADY Bi-Mor Gov't Surplus; Neil O. Sheldon, Inc.
SCIPIO CENTER Krueger Feed & Supply Co.
SENECA FALLS Farmco, Inc.
SHERBURNE Sherburne Agway
SHERMAN Sherman Dept. Store
SIDNEY Sidney Agway
SOLSVILLE Solsville Agway
SOUTH DAYTON Austin Milling Co.
SPRINGFIELD Nason's Shoe Store
SPRINGVILLE Brown Shoe Store; Springville Agway
STILLWATER Corcoran-Cowin
TUPPER LAKE National Army Stores Corp.
UTICA Seneca Boot
WALTON Cetta Bros.; Tony's Shoe Store
WASHINGTON MILLS Sauquoit Valley Agway
WASHINGTONVILLE Washingtonville Agway
WELLSVILLE Agway Coop; Ludden Shoe Store
WESTFIELD C. F. Pratt Co.
WHITNEY POINT Barne's Gift Shop
WYOMING R & S Agricultural Supply

CONNECTICUT

BERLIN Mickey Finn
BLOOMFIELD Bloomfield Farmers Exchange
BRIDGEPORT Liberty Army & Navy
BUCKLAND Agway Inc.
CANAAN B. F. Leader Stores, Inc.
COLCHESTER Ernhorns Grain Store
CORNWALL BRIDGE Monroe's General Store
DANIELSON United Coop Farmers
EAST HARTFORD Highway Surplus; Seapark Dept. Store
ELLINGTON Ellington-Vernon Farmers Exchange
GLASTONBURY Kamin's Dept. Store
GREENWICH B & G Sales
HAZARDVILLE L. R. Hawthorne & Son
LITCHFIELD B. B. Leader Stores, Inc.; George J. Switzer Co.
MERIDEN Dave Clayton; J. F. Raven Hardware Co.
MIDDLEFIELD Agway, Inc.
NEW BRITAIN Winston Shoes
NEW LONDON Schablein's
NEW MILFORD Ralston Purina Co.; Ruwet Sibley Co.
NEWINGTON Shoe Corner
NORFOLK Taylor's Tack Shop
NORTH FRANKLIN Red Rose Farm Service
NORTH HAVEN Agway, Inc.
NORWICH Jack Bass; Bruce's Shoes; Surplus Center; Tongren's
ORANGE Surplus Trading Post
PLAINFIELD Agway, Inc.
PLAINVILLE Mundy's Shoes
PORTLAND Anderson Farm Supply
PUTNAM Putnam Farmers Coop Assn. Inc.
RIDGEFIELD Young's Feed Store
ROCKVILLE Belangers Shoe Store
SIMSBURY B. F. Leader Stores, Inc.; Pattison & Co., Inc.; Valley Home & Garden Center
SOUTHINGTON Baker's Shoes
STAMFORD B & G Sales
TAFTVILLE Eldredge Hardware
THOMPSONVILLE Vincent's Apparel
TORRINGTON Agway, Inc.; Howards; Litchfield County Coop Assn.; Ralston Purina Co.; Checkerboard Feed; H. K. Webster Stores of Conn.
WATERBURY Joel's Shoe Box
WETHERSFIELD Shoe Centre, Inc.
WILLIMANTIC Agway, Inc; Bruce's Shoes; Mackey's Suburban Home & Farm Center; Surplus Center
YANTIC Agway, Inc.

MAINE

AUGUSTA Archie's Army & Navy
BIDDEFORD Biddeford Saco Feed Co.; Picard's Feed & Supply
BREWER Agway, Inc.
CORINNA Davis Supply, Inc.
DETROIT Agway, Inc.
FAIRFIELD Ralston Purina Co.; Checkerboard Feed Store
GARDINER Gardiner Feed & Garden Center
LEWISTON The Carter Milling Co.; Star Shoe Store
SABATTUS Steven's Feed & Hardware Store
SKOWHEGAN Campbell's Feed Store
SOUTH WINDHAM H. K. Webster Stores of Maine
WATERVILLE J. E. McCormick & Sons

MASSACHUSETTS

AMESBURY Ben's Mens Shop
ATHOL Agway, Inc.; Army & Navy Store
ATTLEBORO Conlon & Donnelly Co.
BEVERLY Hanlon's Shoes
BOSTON Linsky Uniforms; Mickey Finn; Snyder's
BROCKTON Agway, Inc.; Campello Shoes
CAMBRIDGE Eastern Uniform Co.
CHICOPEE Paul's, Inc.
DANVERS Agway, Inc.; Rozanne Shoe Store
DORCHESTER Marine Clothing & Uniform Co.
EAST BOSTON Sabo's
EAST LONGMEADOW Country Bootery
FAIRVIEW Potters Shoes, Inc.
FALL RIVER Modern Shoe Stores; Sawyers Campus Shop
FITCHBURG Agway, Inc.; Bean's Shoe Store; Student Bros.; United Co-op Farmers, Inc.
FRANKLIN Agway, Inc.
GARDNER Dow Shoe Store; Student Bros.
GEORGETOWN Marstons Factory Outlet
GREENFIELD Farm Bureau Assn.; Greenfield Farmers Exchange
HARDWICK Hardwick Farmers Exchange
HAVERHILL Ben Cortell; B. L. Gordon & Sons
HOLDEN Agway, Inc.
HOLYOKE N. Ball Shoe Store; Ed Moriarty's Family Shoes
HOPEDALE Hopedale Hardware, Inc.
HYANNIS Hanlon's Shoes
INDIAN ORCHARD Kitchener's Dept. Store
JAMAICA PLAIN Hanlon's Shoes
LEE Ben's Shop; Jack's Dept. Store
LEOMINSTER Student Bros.
LOWELL Farm Bureau Assn.
LYNN Jerry's; Packard Shoe Store; J. B. Simons
MALDEN Hanlon's Shoes
MANSFIELD Mansfield Feed & Farm Supply
MARLBORO Jobbers Outlet
MAYNARD Maynard Army & Navy Store
NATICK Hanlon's Shoes; Outdoor Store; Wells Shoes
NEEDHAM Wells Shoes
NORTHAMPTON Agway, Inc.; Ted's Boot Shop
NORWOOD Hanlon's Shoes
PALMER Haley's Grain Store; Pee-Dee Shoes; Potters Shoes, Inc.
PITTSFIELD Agway, Inc.; Jim's House of Shoes; Shoe Box, Inc.
QUINCY Hanlon's Shoes
ROCKLAND Lelyveld's Shoe Store
SALEM Jerry's
SHELBURNE FALLS Agway, Inc.
SOUTH CHELMSFORD Agway, Inc.
SOUTH EASTON John O. Dean Co., Inc.
SOUTH LANCASTER Lancaster Grain Co.
SOUTH WEYMOUTH Farm Bureau Assn.
SPENCER Agway, Inc.
SPRINGFIELD Brooslin Shoes; Insterstate Sales Corp.; Potters Shoes, Inc.
THREE RIVERS Three Rivers Outlet
TOPSFIELD Essex County Co-op Farming Assn.
WALTHAM Farm Bureau Assn.; Hanlon's Shoes
WARE Goldstein-Gurwitz, Inc.
WESTFIELD Hamden County Agway, Inc.; C. A. Methe, Inc.; Ed. Moriarty's Shoe Store
WORCESTER Berger's; War Surplus Store

NEW HAMPSHIRE

CLAREMONT Agway, Inc.
COLEBROOK Colebrook Feed Store
CONCORD Mickey Finn
FRANKLIN Morins Shoe Store
LAKEPORT Kasper's Shoes
LEBANON Hirsch's
MANCHESTER Agway, Inc.; LeBlancs Shoe Store; Mickey Finn
MILFORD Savages A & N
NASHUA Little Shoe Store
NORTH WALPOLE Aumand & Sons
SOMERSWORTH Shoe Mart
WALPOLE R. N. Johnson, Inc.
WOLFEBORO H. F. Brown
WOODSVILLE Agway, Inc.

RHODE ISLAND

CRANSTON Modern Shoe Stores
PROVIDENCE Agway, Inc.
WEST KINGSTON Agway, Inc.
WESTERLY Agway, Inc.

VERMONT

BARRE Gladstone Shoe Store; Trade Center
BENNINGTON Gladstone Shoe Store
BRADFORD Hill's; Ralston Purina; Checkerboard Feed Store
BRANDON David Shapiro
BRATTLEBORO Agway, Inc.
BURLINGTON Gladstone Shoe Store; Hill's Dept. Store; Mazel's Dept. Store
CHESTER DEPOT R. B. Erskine Feed Store
ESSEX JUNCTION Agway, Inc.; Phil's
FAIR HAVEN Sheldon Brothers
HIGHGATE CENTER O. C. McCuin & Sons
LYNDONVILLE Hill's Dept. Store
MIDDLEBURY Abrams; Agway, Inc.; Ralston Purina Co.; Checkerboard Feed Store
MILTON Milton Co-op Dairy Corp.
MORRISVILLE Adrians; The Munson Store; United Farmers of New England
NEWPORT Chouinards; Gladstone Shoe Store; H. P. Hood & Sons; Farm Store
NORTH BENNINGTON Whitman's Feed Store
RANDOLPH Hill's Dept. Store
RUTLAND Agway, Inc.; Gladstone Shoe Store
SAINT ALBANS Gladstone Shoe Store
SAINT JOHNSBURY Caplan's Army & Navy; E. T. & H. K. Ide, Inc.
SPRINGFIELD Paul's Economy Store
VERGENNES Fishman's Dept. Store; H. P. Hood & Sons
WHITE RIVER JUNCTION Briggs, Inc.
WINOOSKI Gladstone Shoe Store

MILK PROMOTION . . . A MUST FOR DAIRYMEN

by John W. Sliter*

REGARDLESS of what business you are in, the pros and cons of advertising and promotion are discussed by everyone.

At just about every farm meeting, milk promotion is discussed in one form or another, but there is never time at these meetings to discuss in detail the whys, wheres, and hows. Some of the most often-asked questions about the American Dairy Association and Dairy Council of New York milk promotion program appear here. While I am speaking for the New York-New Jersey Order #2, the questions and answers would be fundamentally the same in all parts of the Northeast.

What is being done to raise the per capita milk consumption of ethnic groups?

As most people know, New York City has the highest concentration of Negro and Puerto Rican population of any city in the nation. Two of the city's radio stations broadcast their programs entirely in Spanish, aimed directly at the Puerto Rican population. We have been a constant advertiser with these radio stations, with commercials developed especially for this portion of our population.

In addition, some of our Dairy Council educational material is being printed in Spanish and distributed throughout New York City schools. Also, as part of the June Dairy Month celebration, special point-of-sale material was printed in Spanish and placed in Harlem area stores . . . right in the dairy case.

We realize that there is still much study to be done . . . and are seriously considering a special market research project here in the Northeast, aimed at finding out more about the Negro and other ethnic consumer groups, particularly within the inner city. Unfortunately, our income at the present time will not allow for this project, but I am sure that if we reach 85-90 percent support from dairy farmers in Federal Order #2 . . . instead of the 65-70 percent we now have . . . this study may become a reality.

Why should we keep contacting teachers, doctors and nurses regarding the value of milk?

An overwhelming majority of these people are in a constant state of education and re-education throughout their professional career. Alarmingly, we find that fewer than half of our doctors who are practicing medicine today have taken more than one course in nutrition. To us, it appears very logical and necessary that we continue to educate these professional people . . . even after they have started their careers . . . because they are so influential in forming the food-consumption habits of both young and old.

I could go on and on describing our success stories in this area, but instead, will tell you about just one. The American Medical Association a year ago issued a statement that filled and imitation milk could be a nutritional substitute for fresh whole milk. A few months ago, they issued a follow-up statement to correct this misinformation, saying that the lack of fresh whole milk in the diet, particularly of the young, can cause nutritional deficiencies.

This did not just happen by itself; our professional nutrition and research people never stopped working to present sound research facts which projected our point for fresh whole milk in the diet.

Why don't we farmers see more of the advertising?

As a matter of policy established by our dairy-farmer board of directors, our funds are allocated to individual markets within Federal Order #2, strictly on a population basis. Within the Order #2 marketing area, there are approximately 20,200,000 people. Of these, 86.1% live within New York City and Northern New Jersey; 2.5% in the mid-Hudson area; 3.7% in the Capital District; 1.9% in the Utica-Rome area; 3.7% in the Syracuse area; 1.6% in the Binghamton area; and 0.5% in the Elmira-Corning area.

If, for example, our promotion budget is a million dollars, then $861,000 would be invested in the New York City-Northern New Jersey area and only $19,000 in the Utica-Rome area. This is the policy of our board, and there are no exceptions.

Why do we spend so much money on dairy princesses and other social functions?

I would first point out that our entire organizational publicity and public relations budget for 1968 totaled only 2.1 percent of all gross income. This included not only the dairy princess program, but also the publication of our own newspaper (the ADA & DC Reporter), our exhibit at the New York State Fair, and support of special June Dairy Month sections in local newspapers. The cost of the dairy princess project in New York and New Jersey totaled only 3/10 of 1 percent of our gross income.

I think it is inappropriate to describe our dairy princess program as a "social function." The New York State dairy princess travels thousands of miles a year within the Empire State, speaking up for dairy products. Her prime audiences are consumer audiences.

Bonnifer Smith, who was crowned at the 1968 State Fair, has appeared in over 100 supermarkets . . . at the dairy case . . . meeting and talking with consumers about the value of dairy products. She has been in numerous schools working with our Dairy Council people, talking to students about the value of milk in their diet.

This past summer, Bonnifer appeared at many county fairs . . . but only at those where she had an opportunity to speak to the grandstand audiences. Here again, her presentations stressed the importance of dairy products in the diet. I might also add that the New Jersey dairy princess is quite active in supermarket and other appearances throughout **her** home state.

Why do we hire people like the Cowsills to promote milk?

Basically, by using such well-known groups as the Cowsills, we have a built-in appeal to a ready-made audience . . . the teenager. Groups like the Cowsills normally have spent several years in the business before attaining stardom. They are readily accepted and believed by their audiences.

While it is true that it costs more to tie in an advertising program with a group such as the Cowsills, our radio, TV, newspaper and magazine advertising definitely receives high ratings of consumer acceptance, particularly by the people we must reach . . . teenagers!

Why do dairy farmers have to promote their raw product?

The dairy farmer is the only one in the dairy industry who is completely dependent upon maintaining the market for real dairy products. Processors, distributors and grocers can easily process or sell other items . . . some in direct competition with milk and milk products . . . and still maintain their income.

Dairy farmers are not alone in the concept of promoting their product. Orange, wool, sheep, turkey, potato, apple, peach, and cherry producers, and others, have been doing the same thing for many, many years . . . and in some cases at a much greater rate of investment.

Why doesn't the producer have more to say about how his money is spent?

The entire program of milk promotion by ADA and DC of NY comes about with the approval of the dairy farmer members. When the phrase "producer–financed, producer–directed" is used, this best describes the way the organization is run. At present, there are 19 districts that make up the milkshed; each has a seven-man local committee elected by dairy farmer members.

The committee elects one of its members to serve on the central board of directors, and these 19 elected directors serve with eight other directors appointed by Dairymen's League Cooperative Association, Eastern Milk Producers Cooperative Association, New York Farm Bureau, New York State Grange Patrons of Husbandry, Niagara Frontier Cooperative Milk Producers Bargaining Agency, Northeast Dairy Cooperative Federation, Rochester Cooperative Milk Producers Bargaining Agency, and United Milk Producers of New Jersey. These 27 directors make the policies and decisions of the organization.

They meet at least three times a year to review the activities of the membership committee, publicity and public relations committee, and the promotion and education committee. Additionally, the ten-man executive committee, elected by the board, meets monthly to review and direct the complete financial and program activities of the organization.

If any dairy farmer has any questions at any time, I would suggest he contact the director nearest him.

BOARD OF DIRECTORS

ADA & DC of NY
(All from New York State unless otherwise noted)

William D. Allen	Van Hornesville
Robert Baldwin	Worcester
Robert Ball	Warwick
Glenn Brown	Randolph
Edwin Bush	Montrose, Pa.
Allen Crego	Baldwinsville
Jack Damgaard	Bovina Center
Russell Dennis	Rochester
James Donnan	New York City
Paul Fishel	Ogdensburg
George Gillespie	Covington, Pa.
Keith Handy	Fort Plain
Ronald Harris	Stanley
Howard Hutchinson	Heuvelton
Paris Ives	Bainbridge
Raymond Johnson	Schaghticoke
Robert Manners	Ringoes, N. J.
C. Lester Martin, Jr.	Willow Hill, Pa.
Fred Marshall	Munnsville
James Mead	Amsterdam
Howard Merrill	Walton
Leon Musser	Lewisburg, Pa.
Allen Ostrander	Theresa
Albert Stratton	Buffalo
Raymond Tarbell	North Bangor
John Thorn	Thompson Ridge
Robert S. Turner	Horseheads

*General Manager
American Dairy Association and
Dairy Council of New York

STUDY EGG PRICING

Wrestling with ideas aimed at improving or replacing the present egg-pricing system are these representatives of the nation's poultry industry serving on the National Egg Pricing System Study Committee.

Shown at one of a series of meetings to consider proposals mentioned in the USDA Economic Research Service report on "Pricing Systems for Eggs," are (l. to r.):

Donald D. Nicolaysen (United Egg Producers); Berwyn Gehgan (Northeastern Poultry Producers Council); Ralph Crooks (North American Poultry Cooperative Association); Herbert B. Gabriel (Great Atlantic & Pacific Tea Co.); Blanton Smith (Institute of American Poultry Industries).

At head table: Phillip Alampi, New Jersey Secretary of Agriculture and chairman of committee; Dr. George B. Rogers, U.S. Department of Agriculture and committee secretary.

Neil Castner (Poultry and Egg National Board); Harry E. Trembath (Pacific Dairy and Poultry Assn.); Ernest Brown (American Poultry & Hatchery Federation); John Wallace (Southeastern Poultry & Egg Assn.); Max Willardson (Willardson Company, Inc.); Herbert Becherman (Smelkinson Brothers Corporation).

Absent when picture was taken: Milton G. Inkeles, (W.W. Elzea, Inc.)

EG-GRO TECH

A new corporation, Eg-Gro Technology, will produce and market fresh eggs in western and central New York State, using a wide variety of modern technology and automation in an "Egg Factory" which will be located within 40 miles of Rochester. The company offices are at 827 Sibley Tower Building, Rochester, New York 14604.

Initial facilities will include buildings for ¼ million laying hens, baby chick raising units to support the laying flocks, feed mixing equipment, automatic egg gathering, handling and packaging machinery, and a complete marketing and distribution center. The company expects to eventually reach a goal of ¾ million hens and an annual distribution of 15 million dozen eggs.

Members of the board of directors of the corporation are: George H. Arnold, Donald M. Bay, Richard C. Call, Lawrence E. Deller, G. Ray Dyment, Jr., and William W. Stopper. Dyment is also chairman of the board.

POULTRY EXPOSITION

Directors of the Northeastern Poultry Producers Council (NEPPCO) and the Poultry Industry Manufacturers' Council (PIMCO) have agreed to sponsor the International Poultry Industry Exposition to be held in Cincinnati, Ohio, October 26-29, 1970. The decision of the American Poultry and Hatchery Federation whether to join in the sponsorship will be announced later.

Albert J. Russo, president of NEPPCO, and PIMCO's president Don Stoterau, point out that joint sponsorship of an industry exposition is a significant move forward toward a stronger and more unified industry. They emphasize that the co-sponsorship does not affect the individuality of either organization. Each will continue to function as it has in the past, developing its own programs and projects to serve its members.

An important feature of the NEPPCO-PIMCO agreement is that it encourages the active participation of other industry organizations in co-sponsorship of the exposition.

Although the exposition is customarily held in September, dates for the 1970 show were shifted to the following month to bring the dates closer to the time NEPPCO traditionally holds its annual business meeting and convention . . . both of which will be held in conjunction with the Cincinnati event.

With Our ADVERTISERS

SOLID STATE COMBINE

As the popularity of air-conditioned, dust-proof cabs on combines has grown . . . and as belts, chains, and pulleys have been increasingly shielded for safety . . . the operator has been cut off from the sights, sounds, vibrations, and even smells that once warned him to stop and make some adjustment in his mobile harvesting factory. International Harvester has remedied this with its own "early warning" devices.

Composed of a dozen magnetic transducers, or sensors, and some 60 or 70 transistors, diodes and other solid state devices, the system monitors such things as rotation speed of shafts, volume of material passing through the combine, pressures and temperatures.

From twelve strategic points in the machine, the sensors transmit electronic signals constantly to a central solid state analyzer or "black box." These incoming signals describe the actual conditions of operation throughout the combine. The analyzer compares this information with preselected values, which represent normal operation, to determine whether the various combine systems are working satisfactorily.

Any abnormal function instantly lights one of a series of red warning lights on the readout panel in the cab and drops a red warning wand directly in the operator's forward line of vision. A glance at the lighted panel tells him the location of the trouble, and he can take whatever action is necessary to correct it. When everything is working properly, a single green light glows on the panel and the warning wand is removed from sight.

ARC WELDING CONTEST

The opportunity for school shop students up to 19 years of age to compete for $15,000 in regional and national awards is provided by the arc welding contest sponsored by the James F. Lincoln Arc Welding Foundation.

Awards are made for the best written entries describing arc welded school shop projects. They need not be complicated or original, just useful on a farm, in a shop, or for the home. The program also offers cash awards to schools in which the main award winners are enrolled.

A 1969 grand national award winner was James H. Norcutt of Upton, Massachusetts, who received $500 for designing and constructing a hydraulic log splitter for the family farm.

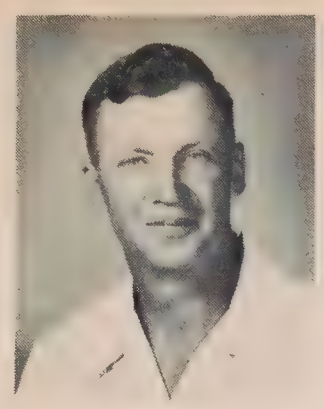
For complete rules for the contest closing June 2, 1970, write: Secretary, James F. Lincoln Arc Welding Foundation, P. O. Box 3035, Cleveland, Ohio 44117.

A new booklet, titled "Your Guide to Identifying Weeds and Grasses," devotes a full color-illustrated page to each of the 54 most-undesirable weeds that plague crop farmers everywhere. An herbicide to control each weed is also suggested. For a free copy, write to: Dept. AA, Elanco Products Company, Public Relations Department, P. O. Box 1968, Indianapolis, Indiana 46206.

The new 1970 Ski-Doos from Bombardier feature a large array of personally-styled snowmobiles . . . five series including a total of 15 models, each series designed to meet specific desires and needs of a particular group of users. Electric start, reverse gear, tilt cowl, and a wide range of other convenience features are standard or optional on various models. There again are three track widths, 15, 18, and twin 15 inch. All engines are snowmobile-proven Rotax powerplants, available exclusively on Ski-Doos, with horsepower from 12 to 40.

An important feature of the Zero bulk tank is its exclusive, patented, built-in Spatter-Spray Self-Cleaning and Sanitizing System which makes clean-up easy. Here's all you do after the tank is emptied: Fill the detergent jar. Set the automatic timer clock. Flip the switch. And the Zero washes, rinses, and sanitizes itself!

For complete information, write Zero Manufacturing Company, Washington, Missouri 63090.



Gayway Farm Notes

by HAROLD HAWLEY

CORN CROP

A year ago, with a very wet fall, corn plants seemed to stand like young poles even through the winter. This year is different. After a wet spring and summer, it turned off dry in mid-August, September and on into October. Corn matured very rapidly, and plants looked as though they had been frosted weeks before the first frost actually arrived.

In addition, as the fall advanced, it became increasingly apparent that there had been a pretty fair corn borer infestation. As stalks broke over, the black areas where a borer had operated were visible. Some people indicated that the combination of humid weather and high temperatures had touched off some bacterial infestations in the plant.

Whatever the combination of causes, the result was more down corn by picking time than anyone prefers. Down corn means rocks in the combine cylinder, or in the ear corn as it goes into the chopper or grinder for high-moisture ground ear corn. It also means harvesting losses.

The interesting thing is that some of the varieties which stood so well last year went down as badly as any other this fall. If history repeats itself, a lot of farmers will blame the varieties and switch brands next year without necessarily improving themselves.

CHEAP FOOD

Few consumers ever admit it, but they (as well as most producers), are well aware that food is a real bargain. They have repeatedly heard how few minutes it now takes for a worker to earn his bread and butter. Unfortunately, cheap food philosophies seem to have become a part of the thinking of too many people.

Try this one for size. A very highly-placed nutritionist recently asked a group of producers if American agriculture was dynamic, efficient, and resourceful enough to meet the nutritional needs of a rising population in this country for the next few years. There was no hesitation in assuring him there would be enough food for everyone in the U.S.A., and some left over for export.

The nutritionist was concerned about the diet of the poor in this country. He said they not only do not eat enough, but that the composition of their diet is not nutritionally desirable. So his next question went like this: "Can American agriculture produce enough total food of sufficient variety and quality so that even the poorest families among us can afford a nutritionally adequate diet?"

If I interpret this question correctly, it implies food cheap enough for even the poorest, with all the rest of society getting food at a cost below their ability and willingness to pay. I presume the answer to the question could be in the affirmative . . . but it shouldn't be.

American agriculture should not be asked to subsidize most of society in order to ensure food prices so low as to be within reach of the poorest. Rather, it is the responsibility of **all** of society to care for the poor.

It would seem that food should be priced competitively, and then let the poor get their needed food with help from some governmental agency. Certainly, a generally cheap food policy . . . such as the question implied . . . would spell poverty and disaster for the free, fruitful producers of our plentiful food supply.

Unless I'm badly mistaken, this cheap food policy is one we had better guard against as we evaluate which farm program we prefer.

YOUR TAXES AND MINE

It's becoming increasingly clear that a larger share of the total tax load must come from other sources than real estate levies. While it seems that income taxes and sales taxes are forever on the increase, the spending at all levels of government increases even faster so that real estate taxes keep mounting.

This would be serious enough in itself even if the tax base wasn't being whittled away in

(Continued on next page)

HEAVYWEIGHTS

New Idea "Heavyweights." Built heavier to last longer, to take more beating. Heaviest in our 70-year history, but "light on their feet" because we use big wheels for big traction, big flotation. Heavyweight capacities, too — to 206 bushels.

206 bushel New Idea Single Beater spreader

We've always built our spreaders different. With Penta-treated wood boxes for longer life. Heavier. And stronger. Up front is a welded A-frame hitch, a wood-and-steel endgate. A Belleville spring slip clutch to protect the power train. We use a structural steel frame, steel cross members, steel supports. And full length steel flareboards.

We gave our spreaders the biggest, toughest PTO drive on the market, beefed-up conveyors with 20% thicker rivets, and mounted the whole business on specially formed steel axles. Sure our spreaders weigh more. That's how we made them stronger.

The Heavyweights.

Handling sloppy manure with New Idea Spreaders

The low cost way to do the job. Optional patented hydraulic endgates for all 3 types, or mechanical endgate for the flail or cylinder/paddle—and a pan attachment for the single beater.

Flail type with hydraulic endgate

Single beater with pan attachment

Cylinder/paddle with mechanical endgate

AVCO NEW IDEA FARM EQUIPMENT

Coldwater, Ohio 45828

various other ways. A highway, tax-exempt church camp, the purchase of land by the state, or the condemnation of real estate by any of the many public agencies empowered to take land under the broad power of eminent domain . . . all remove property from the tax rolls.

It would seem that it's long past the time when we should insist on some changes. It's true that for the state to pay local taxes on land it acquires merely transfers tax money from the state to a local unit of government. Not to do this, however, leaves many townships and counties with a loss of tax base they can ill afford.

When one reviews the various exemptions granted on real estate, it is little wonder that those who must pay the taxes are really paying and paying. There are a host of semi-religious, semi-public property owners who get exemptions . . . as do veterans, the aged, and others. It adds up to a staggering loss of revenue and a prohibitive transfer of the total tax load to the rest of the community.

Why more groups aren't out agitating for an end to these exemptions is a puzzle to me.

We are now approaching the zero hour on deciding how property shall be assessed. The pressure to raise tax money is leading to assessments on the basis of a theoretical potential market value. In some cases, this is many times the value of the land for farming uses.

If good land is to remain in agriculture, the law must be changed so that assessments will be on the basis of current usage. When real estate is sold for another use, the sale price should then become the guide to the assessors. A lot of farms may be taxed out of existence before we get this done. New Jersey has made the move to present-use taxation for farm land, and it's later than we think here in New York.

OUTSMARTING THE SMART ONES!

When the geese began migrating this fall, they stopped over on Cayuga Lake and at the wildlife refuge near us. It wasn't long before we had geese coming into the corn stubble fields every morning.

Now it may not be too hard for a man with decoys set out in a field before dawn to get a few geese to drop in close enough to shoot. But for a guy who wants to finish milking first and then go up to the field for a quick look-see, getting within range is quite a chore. Each day the geese were in a little different place. This made the strategy mapped out the day before less than useful.

Their sense of sight and sound must be at least as good as everyone says. We crawled up toward them . . . we skulked along fence rows . . . we waited over a rise for them to feed toward us. Each time they outsmarted us!

We've even put one man in the direction we were sure they would fly and then intentionally walked them up, only to have them fly away in another direction. All this time they kept returning daily because we hadn't yet got close enough to shoot at them.

It's hard to imagine anything as hard on one's ego as to be repeatedly outsmarted by a bunch of dumb (?) geese!

RECORDS

Everyone is out to set records but we still have a way to go before everyone is **keeping** good ones. The new computer records . . . once the bugs are completely out of them . . . seem sure to make other methods of summarizing and analyzing farm records obsolete.

Last year was our first with a computer system. At first we had headaches getting our entries coded right, but gradually we learned to do our part. There were some errors and delays in getting the material fed into the machine. But now, the people who punch cards and prepare the records for the machine have increased their skills, too.

The big thing about this system is that a month after something happens, we receive a print-out sheet showing receipts and expenses for the month (and year to date) by accounts. Last November, and again this year, we were able to pretty well decide what kind of a profit we would have for the year. This enabled us to adjust our purchases before and after the new year to minimize our taxes. One can afford to pay considerable for help with his record-keeping and analysis if the results come back promptly.

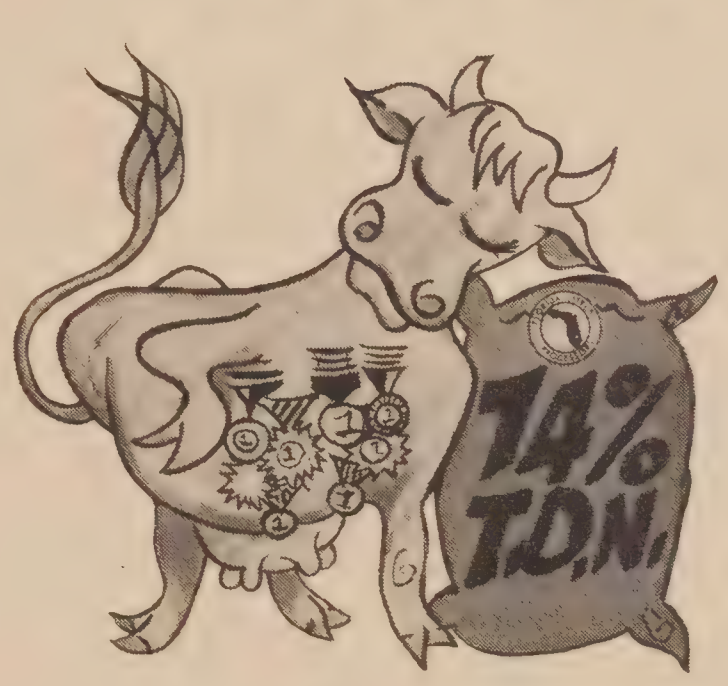
Likewise, figuring income taxes from the records really gets to be a minor job. The computer doesn't write the check, but it gets pretty close to that point!

After nearly two years on this system we are convinced that it's pretty much consistent with the rest of agriculture . . moving ahead, mechanizing, costing more, and well worth it!

HIGHER IN T.D.N.☆

☆ T.D.N. (Total Digestible Nutrients).

FLORIDA CITRUS PULP



Vital to any feeding program are sufficient digestible nutrients, along with proteins and minerals. Digestible nutrients are an important part of a feeding program and Florida Citrus Pulp is your best feed buy because it has 74% T.D.N. Before planning your next feeding program, consult your dealer or distributor about including Florida Citrus Pulp in your dairy or beef feed mixes . . . available in bag or bulk . . . by rail or truck.

For more information on Feeding or Total Digestible Nutrients, send for a FREE full color Citrus Pulp Brochure, or send for "Men Who Feed the World," a 16 mm color film for group showing.

Content	% Protein	% Fat	% Minerals	% Fiber	% N.F.E.*	% T.D.N.**
Citrus Pulp	6.0	3.0	4.2	16.0	55.0	74.0
Beet Pulp	9.2	0.5	3.4	19.8	57.2	67.8
Snapped Corn	8.0	3.0	2.4	10.6	64.8	67.8

(* Nitrogen-free extract ** Total Digestible Nutrients)

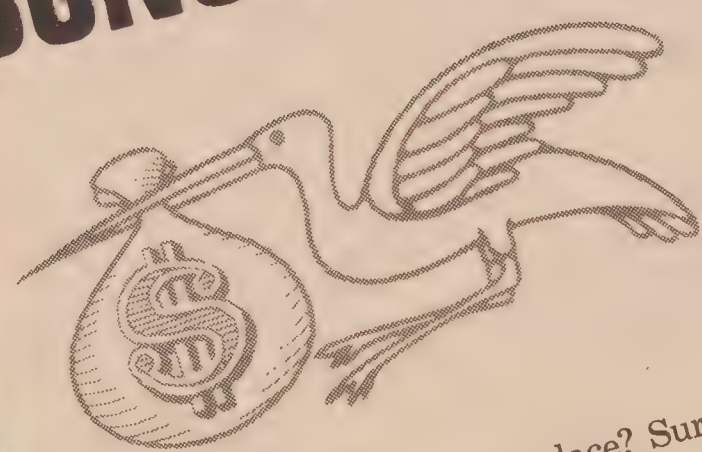
THE BEST OF FEED FOR THE BEST OF BREED

FLORIDA CITRUS PROCESSORS

P. O. BOX 2134, DEPT. F.C.C. 74 DAYTONA BEACH, FLORIDA

He's headed out with another bundle of 6% cash for International

EARLY DELIVERY BONUS buyers!



Will he drop it off at your place? Sure will, if you buy and take delivery of a new International tractor, combine, baler (and many other machines) between now and the end of February!

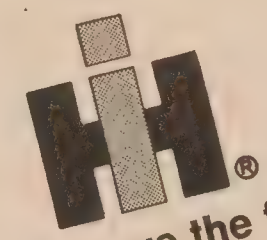
Buying early will earn you an immediate cash bonus figured at the rate of 6% per annum on the amount of cash you pay plus the value of your trade-in. For example, this bonus will apply on tractors until March 31, 1970; on combines until July 31, 1970.

Your dealer has another bonus for you, too. Under his special financial terms, you pay no finance charges 'til well into 1970.

And there's more. Buy before December 31, and you may be able to take advantage of investment tax credit and depreciation allowances.

Three solid reasons to make your move to International right now. Your dealer is ready to deliver the tractor and equipment you need!

The faster you move, the bigger your bundle of cash!



First to serve the farmer

International is a registered trademark of International Harvester Company, Chicago 60611

TAX MANAGEMENT

W. T. McAllister of the University of Delaware lists the following items that decrease 1969 taxable income and require management decisions before December 31.

1. Pay up operating accounts and unpaid bills.
2. Buy and pay for some of next year's supplies (be sure tax saving is greater than cost of advance purchases).
3. Buy things that last longer than one year but are not capital items . . . paint, small tools, building and machine repairs.
4. Delay selling cash items until after January 1, but compare the tax saving with possible price declines. These include crops, livestock, timber and items with large capital gains.

Farmers can save tax dollars by paying their children reasonable wages for the farm work they do. This has to be an "arms length" transfer of payment in cash or in kind between parents and children.

Investment Credit

The investment credit farmers are allowed when they buy machinery can also be a tax saver. It's applicable to equipment having a useful life of at least four years. It amounts to seven percent of the investment if the life of the investment is eight years or more; ⅔ of this amount if life is six years; ⅓ if four years, and is deducted from the total income tax due on the return.

Investment credit can be a source of trouble, though, when equipment on which the farmer claimed investment credit in a prior year is not kept for the length of time used in computing the credit.

Example

An example would be a tractor purchased in 1965 for $5,000. The farmer expected to keep the tractor for six years and claimed two-thirds of the investment credit allowed. This would be ⅔ of ($5,000×.07) or $235. However, the tractor was not large enough, the farmer traded it in 1969 for a larger one . . . investing an additional $4,500.

The problem is doubly complicated, because having owned the tractor for four years, the farmer qualifies for only one-third of the investment credit, not the two-thirds claimed. Therefore, one-half of the investment credit, or $117.50, must be paid back as tax on the 1969 report.

The second problem is to determine the basis for figuring investment credit on the new tractor. This is done by adding the undepreciated value of the machine traded to the amount of additional money invested. Assume the remaining value of the original tractor was $1,667. The basis for determining investment credit on the new tractor would be $4,500 plus $1,667 or $6,167.

If the farmer determined that the life of this new tractor would be six years, he could take two-thirds of the full seven percent investment credit allowance. He reports this investment credit of $287 on form 3468 and transfers the tax credit to line 13 of form 1040.

Boost Income

The year 1969 was a pretty good year for most northeastern farmers. But some may have had small incomes and it may be to their advantage to boost '69 incomes. Here are ways:

1. Sell livestock and crops before January 1.
2. Postpone bill payment past January 1.
3. Boost miscellaneous income by selling wood, working off the farm or doing custom work.

McAllister gives these cautions to farmers who **do** attempt end-of-the-year tax management:

1. It is **never** good business to report anything but the truth on an income tax return.
2. An adjustment to minimize taxes can result in an unprofitable long-run decision for the business.
3. Attempts to minimize taxes in the current year may mean larger taxes in future years.
4. Personal deductions and exemptions not claimed each year are automatically lost.

FFA AWARDS

S. Kenneth Wilmot, son of Mr. and Mrs. Edward Wilmot of Fillmore, New York received the National FFA Foundation soil and water management award at the national convention of Future Farmers of America held at Kansas City. In 1968, he completed four years of vocational agriculture under the direction of his father, the vo-ag instructor at Fillmore Central High School . . . and is now a student in the College of Agriculture at Cornell University.

Top regional awards were won by several of the Northeast's Future Farmers. The award, name and address of recipient, and name of instructor, are:

Crop farming — Roy E. Jacob, Indiana, Pennsylvania; Richard Stumpf.

Agribusiness — John Depres, Southbury, Connecticut; Hugh J. Ripper.

Agricultural mechanics — Peter R. Jacquier, East Canaan, Connecticut; Clarke B. Wood.

Dairy farming — Thomas A. Colpetzer, Tyrone, Pennsylvania; A. R. Simkins.

Conservation officers . . . more than 225 . . . patrolled New York State last year by auto, boat, on foot, snowshoes, skis, snowmobile and airplane. More than 4,000 cases were successfully prosecuted with the recovery of more than $134,000 while more than 1,200 less serious cases were disposed of by oral or written warnings.

All that spaghetti toward the front of the lettuce harvester is made up of hydraulic hoses, transmitting power to various units.

Cuts Lettuce — A self-propelled mechanical lettuce harvester designed to tackle two rows at a time is in the early stage of perfection at the New York State College of Agriculture at Cornell. In contrast to the conventional manual method of cutting the head from the stump and leaves while the root remains in the ground, the experimental machine pulls the lettuce plant from the ground and cuts the head off the root.

Agricultural engineer E. Stanley Shepardson, who is directing the development of the harvester, reports that the machine does a fine job of cutting lettuce in the field, but cutting is only a small part of the overall operation, and how to handle the lettuce from this point on is yet to be worked out. Results of field studies now being made would influence the direction of the research efforts ahead.

REDKOTE BEANS

The new halo-blight-resistant red kidney bean, Redkote, is being grown for seed in New York State . . . 2000 acres certified in 1969. Previously, all red kidney bean seeds came from western states where beans were grown under irrigation, and halo blight couldn't get a foothold.

Redkote seed will be available to growers for the 1970 season.

Here's where "non-skid" pays off...

it's those extra pounds of milk at weighing time!

More dairymen are spreading our Barn Calcite — most everybody calls it "non-skid" — on their barn floors and runways because it *really* takes hold . . . keeps their cows on firm footing even in wet weather . . . helps them produce all the milk that's bred into them. Lime Crest Barn Calcite also keeps floors white and clean looking so much longer . . . it's economical, easy to use, and makes better fertilizer, too.

Your feed or farm supply dealer is the man to call. If he's out of "non-skid" right now, send us his name . . . we'll make every effort to see that he's supplied.

LIME CREST
BARN CALCITE
LIMESTONE PRODUCTS CORPORATION OF AMERICA, NEWTON, NEW JERSEY

No other super lightweight chain saw starts as easy as the new Homelite® E-Z.

Homelite's exclusive Simplex Starting System insures fast, easy starts . . . every time, any time.

No kidding. Prove it to yourself. Go to any participating Homelite dealer and try it. Gently grasp the starting handle between thumb and index finger and lift . . . the super high performance engine spins over with unbelievable ease.

But, easy starting is only one of many unique features found on the new Homelite E-Z chain saw. It has power to spare to cut trees 3 feet in diameter, saw 8 inches of hardwood in 6 seconds (softwood in less than 4), yet weighs only 8½ pounds*. So, come try the only super lightweight chain saw that delivers like a pro.

Consult your local classified directory for your nearest Homelite dealer, or visit these factory branches.

Your participating Homelite dealer has a free gift for you when you come in and try it for yourself.

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Carl Frenz checks cattle-management instructions in the milking parlor.

DAIRY FARM

Carl Frenz of Salamanca, New York, successfully seeded . . . without a nurse crop . . . 10 acres of Saranac alfalfa in 1969. The field had been in corn for six years previously; for the first five of those years, Atrazine (Aatrex) was applied as an herbicide at two pounds per acre. The sixth year, 2, 4-D was used as the herbicide on corn in this field.

In 1969, the ground was plowed, fitted, and Eptam was applied . . . then disced in immediately. Fertilizer (0-25-25) was put on at 300 pounds per acre with a drill . . . on which was also mounted the seeder, and behind which a log chain was dragged. A land roller performed the final operation of firming the soil around seeds. Seeding rate was 20 pounds per acre of clear alfalfa.

Manure Tank

This is a farm with 84 milkers housed in a recently-built free-stall setup. Manure goes to a round tank measuring 30 feet in diameter, and 12 feet deep. In the summer there can be two months between cleanings . . . in winter, Carl tries to empty every 30 days.

After cleaning the tank, Carl pumps water from a nearby creek so that there are two feet of water in the bottom. He didn't do this at first, but found it necessary for easy handling of manure. Water from both milkhouse and the double-four herringbone milking parlor also goes into the tank.

Liquid manure . . . actually a slurry . . . is applied to land at up to 30 tons per acre. Carl is experimenting with commercial fertilizer application rates to see just how much he can replace with the flow from his honey wagon.

Corn Crop

Corn ground, of course, tends to get the heaviest applications. Seventy acres of corn were planted here in 1969. Carl shoots for a harvest population of 23-24,000 plants per acre in rows spaced 36 inches apart.

Silage is the major roughage here . . . 90 acres of hay-crop harvest went into the silo this year. There are two 20×60 tower silos, plus a 12×35 and a 12×30. Hay feeding amounts to about four pounds per cow per day; the rest of the roughage is some type of silage. The cows run on three acres of exercise land, but it doesn't really qualify as pasture! —*G.L.C.*

NO NURSE CROP

"We have had some poor seedings of alfalfa," said George Schuster of Livonia, New York, "so now we are seeding clear either in the spring or late summer. We have one piece of new seeding put in about the middle of August . . . after wheat harvest . . . that looks fine.

"We put on a ton of lime per acre plus 200 pounds of 10-20-20 fertilizer. We seed with a drill which puts the rows 7 inches apart, and then use a cultipacker. Variety is Saranac.

"I can't see much difference in spring or fall seeding so far as the seeding is concerned, but there are two advantages to doing it in the fall . . . the work is done at a time when work rushes us less, and in the spring, seeding might be delayed by wet weather."

George operates a one-man dairy farm of 161 acres, practically all tillable. His brother Vincent owns a one-man dairy farm across the road.

Share Machinery

"We own quite a bit of machinery together," George added, "and we work together quite a lot throughout the year. It cuts down on the investment in machinery for both of us. And two men can often accomplish more than twice as much as one man working alone."

George has several children. Two boys . . . aged 10 and 11 . . . already help out considerably.

The herd is relatively small as we think of size today. George milks 32 cows and raises the usual number of young stock. Twenty-one crop acres are in corn which gives silage for 10 months. Greenchop is fed during two summer months.

"We husk 10 acres of corn," George said. "We have the corn ground with oats and 400 pounds per ton of a 32 percent high-protein supplement. Sixteen pounds per cow per day is about tops on grain feeding."

Weevil Damage

Incidentally, George reported some alfalfa weevil damage this past year and plans to spray in 1970. Alfalfa is left down 5 years and sometimes pastured the 6th year.

It's interesting to note that George's uncle . . . from whom George bought the farm . . . kept about half the number of milkers now on the farm, but had a full-time hired man for years. By contrast, George does practically all the work alone.—*H.L.C.*

BIG TANK

Robert Barie and son Dick, of Bethany Center, have recently installed one of the largest bulk tanks in New York State. It is rated at 3,600 gallons, and its housing is unusual for the Northeast.

It is unusual because much of the tank is not housed at all! In an arrangement known as a "bulkhead tank," about 90 percent of it protrudes through the milk house wall into the outdoors! The manufacturer guarantees that the temperature of the milk in the tank will not vary up or down by more than two degrees from the temperature-control setting.

There are two compressors for cooling the tank, each powered by a 10 h.p. electric motor. Bob was able to talk the power company into bringing three-phase power to the farm to assist in making this installation.

This economical form of electric power is also used in connection with the enormous materials-handling job of moving silage. This farm has five big silos . . . 24′×55′, 30′×60′, 30′×70′, 30′×80′ . . . and a 20′×60′ Harvestore for storing high-moisture grains. The Baries, by the way, are feeding a substantial amount of high-moisture wheat in 1969, in addition to the HM corn they have used for a number of years.

As you may have guessed, the herd is a big one here . . . 415 cows. They produce enough so that the Baries' farm is on an every-day pickup schedule by the bulk milk truck. —*G.L.C.*

NO-TILL CORN

The corn grows well on both sides of Ridge Road north of Penn Yan, New York, but if you look closely at some of it you'll see a peculiar "rug" between the rows. It's no-till corn on the farm of Robert Schiek, who grew 35 acres in this fashion in 1969.

The purpose of no-till, of course, is to plant a crop on either sod or stubble without doing any plowing or harrowing . . . just kill the existing vegetation with a selective herbicide, and plant . . . all in one pass across the field with a special planter. The key to success is the effectiveness of knocking out the vegetation other than the crop planted.

Herbicides

On sod ground, Bob used 1 quart of Paraquat plus 5 pounds of Aatrex per acre (the latter was 80w, therefore 4 pounds actual ingredient). This took out the sod plants quite effectively . . . except for dandelions. He experimented on one acre with 2,4-D, plus Aatrex and oil . . . and really cooled the dandelion menace!

He figured on planting 29,000 corn seeds per acre . . . shooting for a harvest plant population of 22,000 to 24,000. On conventionally tilled corn he plants 25,000 seeds per acre.

"Unplowed ground, especially when it's wet, is cold," Bob comments. This accounts for the extra seeds planted . . . and remember that the soil is also colder than usual because no-till allows earlier planting. Untilled land is not only ready to plant without time-consuming tillage, but its firmness as compared to tilled land also speeds the time when the planter and tractor can roll on it.

Early

Bob began planting the no-till land on May 13 in 1969 . . . even though it was a notoriously wet spring. On plowed ground, he couldn't begin planting corn until the day before Decoration Day! "The chemicals required to kill sod cost as much per acre as plowing," he reports, "but no-till saves time, and lets you get going earlier."

The four-row planter is an Allis Chalmers . . . a company that has been doing a lot of research and design work in the no-till area. It opens a seed row with a fluted coulter and applies fertilizer, seed, and herbicide as it goes. Fertilizer rates used were 500 to 600 pounds per acre of 15-8-12 or 16-8-8.

An examination of the cornstalks showed that European corn borer damage was evident, although not extreme. The bug experts indicate that successive years of no-till on cornfields may increase borer population because tillage is a practice that tends to do 'em in. There was an unusually large first brood of borers in the area in 1969, but no second brood of consequence. —*G.L.C.*

Robert Schiek looks at no-till corn. Variety is XL 315, planted on field previously growing alfalfa (note mulch formed by dead vegetation).

Food For The Spirit

by Robert Clingan

HIS OTHER SHEEP

In the tenth chapter of John, Jesus said, "I have other sheep that are not of this fold." The true Christian rejoices over how many sheep our Lord has, whether they worship in his church or identify themselves with his religious fellowship.

Who are these other sheep? It is easy today to think of them as people in other churches like our own. This was not always so . . . or easily possible. There was a period in American life when lines were drawn sharp and hard. It was far easier for a person to think of his church as *the* church rather than *a* church.

By now we have moved through a stage of "live and let live," of respect for each other's rights and points of view. Even those churches most exclusive in the past, today condemn that exclusiveness within their own membership. We are beginning to recognize the full truth of our Lord's statement when He said, "I have other sheep that are not of this fold . . . "

I would also like to think of groups engaged in ministering to human needs as "other sheep not of this fold." One evening I heard a first-hand report . . . a dramatic story . . . of the work by people of the good ship "Hope," anchored off a city in South America, and building through demonstration and education a medical and health program for an entire city. Whenever these young people . . . and some older folks . . . dedicate their skills, their energy, their imagination to these new tasks, once again we see the sheep of Him who taught compassion.

Years ago, Father James Keller created the Christopher movement, based on the legend of a saint recently removed from the roster by the Catholic church for lack of historicity. In the legend, St. Christopher carried a child across a stream, and discovered that he bore Christ himself . . . hence Christopher, or Christ-bearer.

In this movement, Father Keller called on people to help change the world through the workaday world. He said that the evil in the world was caused by less than 5 percent of the people. Surely it can be saved by 5 percent of the people!

He especially challenged young people to enter strategic decision-making and opinion-changing vocations such as education, communications, politics, and government. People who see this challenge and respond to it are also His sheep. Whether they identify themselves with the fellowship of one of his churches is not as important as how sincerely they give themselves in service to the needs of others.

Let us Christians rejoice that our Lord has so many sheep scattered throughout His world today!

DOES 4-H PAY?

My kids are deeply involved in 4-H Club activities. They raise and show calves at the Delaware County Fair at Walton, New York. I'm a great believer in 4-H, and I wouldn't stop them from participating if I could!

Their calves keep them busy, and interested, and involved with farm activities. Also, they get to know the nicest people in 4-H work. But from a financial standpoint, 4-H doesn't always pay . . . hardly.

For instance, we have just completed another county fair, and I've been figuring up the debits and credits. Here are a few of my findings:

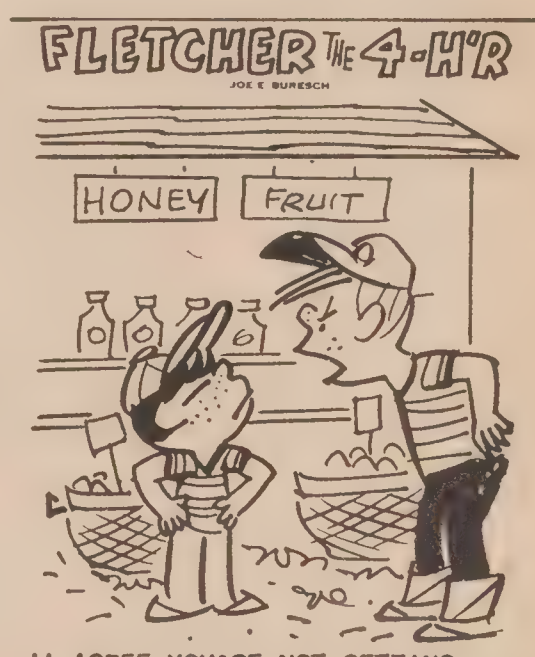
Trucking, to and from the fair, $32. Feed and beet pulp, $24 . . . not to mention the tons swiped from daddy's bin all winter. Then there are 17 bars of cow soap, curry combs, brushes, bleaches, polishes, powder, fly spray, halters, ropes, snaps, buckets, tubs, blankets, and a hundred other things.

There is the time lost while we watch our kids wrestle the critters around the ring . . . beautiful hay days, mostly. My time and my kids' time (they spend a week at the fair) . . . no help with the chores.

How many gallons of gas to make the 60-mile round trip six days in a row? How many sodas and hamburgers? How much ribbon and tinsel to pretty up the stalls? The list goes on and on . . . would you believe over a hundred dollars? You better believe it!

Now let's look on the credit side . . . a couple of red ribbons, and several whites. A dollar here, and fifty cents there, adds up to $24.59.

As I said in the beginning, 4-H doesn't always pay financially, but I consider it the best investment in my childrens' future I could possibly make! *—Mrs. Seaman Richmond, Hobart, New York.*



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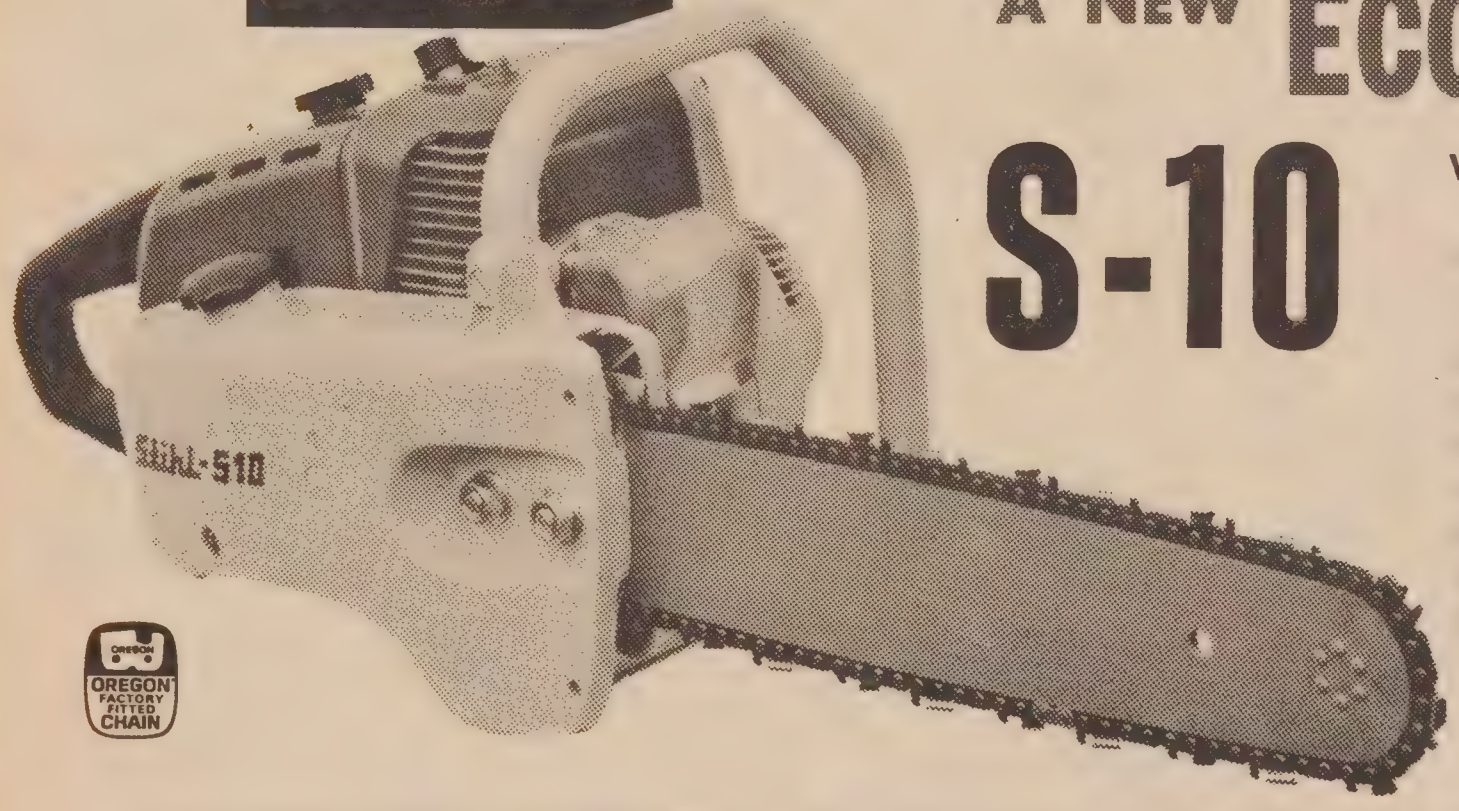

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Doc Mettler Comments On:

YOUR BREEDING PROGRAM

THE stillness of the world on the morning of the first snowfall can wake a man just as surely as the sound of a horse kicking his stall or a cow bellowing from some place on the farm where she doesn't belong. Once you've ascertained the reason for being awake early, it is pleasant to just lie there and have a few minutes to plan your day.

People who don't enjoy waking early in the morning don't enjoy the dairy business, and I feel sorry for them. It is true that a man shouldn't farm unless he is farming for profit. However, whether a man is a dairy farmer or an investment broker, he won't make a success of it (and in today's world you don't have profit without success) unless he **likes** what he is doing.

Planning

Whether you wake early because of a snowstorm, or do your planning as you have your morning coffee, take some time tomorrow morning and review your breeding program. This is the month that counts the most in breeding in the Northeast. Early fall milk prices are the best, and cows freshening in early fall should make you the most profit. If you don't have those late summer and early fall cows bred back by the first of the year, you are losing money every day.

A successful breeding program depends on two things . . . teamwork and records. The team consists of you, your help, your inseminator, and your veterinarian. Make no mistake about it, though, you are the leader of this team! If those cows aren't bred to calve back by twelve months after the last calf, you are the man who is responsible.

Keep 'Em Simple

As far as records are concerned, keep them complete, but keep them simple. The day a cow calves, start preparing her for breeding back. Most important, write her fresh date down either on the card or blackboard over her stall. In loose housing, mark it on a card or chart that is right where you can see it easily. Also at freshening time make a simple notation where you can see it if she retained, had calving difficulty, or showed evidence of infection after calving. A simple notebook or card file with each cow's name or number is needed for this sort of thing.

Leave yourself, and everyone else concerned, a note . . . either on a note board or blackboard near the breeding records . . . to have things done that should be done, such as a list of cows to be infused after first heat or after first breeding.

Cows that retained, or had other problems at calving, should be examined by your veterinarian between four and six weeks after calving so that he can infuse them or treat them as needed **before** it is time to breed them. Cows showing pus discharges after three weeks of calving may need antibiotics, or antibiotics and hormone capsules, put into their uteri before this 30-day exam. Cows or heifers that tore at calving may need some minor surgery to close the upper part of the vulvar opening so that they don't "gape" and suck air and infection.

I don't feel that it is necessary to examine every cow prior to breeding, unless you have had a serious cyst problem in your herd. If a cow calved and cleaned normally and has a good normal heat 30 to 60 days after calving, she should be all right to breed by her first heat after 60 days. Concentrate on the ones that have had problems.

Regular Visits

This can best be done by making arrangements with your veterinarian for regular visits for breeding problem examination. Don't wait until you have a milk fever and then ask to have cows examined on the same call. You and your veterinarian will both be wasting time and neither of you will be doing a proper job.

In large herds, a week may be the interval between visits from your veterinarian. In no herd should the interval be over a month during breeding season. Either set up a certain day each week, or month, or call a couple of days in advance and then be ready with cows confined and records up to date.

Of course, in a loose housing setup where you can confine only six or eight animals at a time, it is acceptable to keep in a few for pregnancy or pre-breeding exams when you keep one in to be infused . . . as long as the veterinarian knows when he arrives on the farm that he is expected to do this work.

It is a very discouraging thing to have a message on the two-way radio at 9:30 in the morning such as follows:

"Joe Smith has some cows to go over."

Your reply is, "For what?"

"I don't know, he wasn't very definite, just a few for heat and pregnancies, I guess."

"Well, I'm supposed to be at Sam Jones' at 10:00 to preg-check his whole herd."

"But Joe says come right away because he's been holding them in all morning and he has to go into town by 11:00."

What would you do if you

were the veterinarian? If you do go to Joe's, he'll keep you there until 11:00 and Sam will be left waiting with his own and two men's time going to waste. If you don't go to Joe's, he'll be angry . . . and while in town he'll tell everyone he sees, "Those d--- vets are getting so independent these days they just won't come when you want them any more!"

I know the Joe Smiths don't read the American Agriculturist, but if he complains to you some day, please tell him that farming is a big business today, and a good farm manager plans ahead. For years we veterinarians have tried to take care of the Joe Smiths, but today we can't. It isn't fair to the rest of you who are good managers.

Heat Charts

A heat expectancy chart is an absolute necessity in a successful breeding program. Your inseminator will furnish you with one. This, too, should be used from the first days after freshening. You mark down the first heat so as to establish a pattern. There is no quicker, simpler way of recording heats, and it will often show you that a cow is cystic before you would realize it otherwise.

Cystic cows usually show constant heat or too-short intervals, under 19 days. Often a cystic cow can be detected by the shape of her tail head and pelvis. If you see a cow whose ligaments are relaxed like a cow ready to freshen she is either cystic or she has infection in her uterus. On occasion this will show on a cow before she starts irregular heats, so it pays to have your veterinarian check such a cow before she is bred.

Probably the biggest reason why cows are not bred back in time is missed heats. Many veterinarians feel that more often it is the man and not the cow who misses the heat. In today's larger herds, with less man hours spent per cow, it is easier to miss heats. Here again teamwork is important. Everyone working with the cows should have the responsibility of detection.

Reporting Heats

Some farmers even pay a bonus to the man who reports a heat. Too often I have said to a farmer when checking cows, "This cow has had a heat since the last exam" . . . and he has replied, "It must have been silent" . . . only to hear the hired man chime in, "I saw her in heat last week."

When the farmer says, "Why didn't you tell me?" the hired man says, "I did, but you didn't pay any attention," or "I didn't bother because you'd tell me you already knew it and not to bother you."

Why not have a blackboard or note board to write down "cows in heat today"? This should be everyone's responsibility, and if a man writes one down and is wrong, don't ridicule him. Next time he might see one and be too cautious to tell you.

I don't care how busy you are, someone has **got** to have the time to watch cows when they are not eating, but just loafing, which is the time heats are detected. Besides this, everyone should be watching all day long for any other signs, such as being down on milk, or the tiny clear discharge that is seen a few hours before heat. If you miss seeing a heat, but see blood, mark it down and watch closely for the next time. If you "don't have time" for these things you may soon have too much time, because you'll be out of business!

Records

Keep records down to these things:

1. A blackboard or card over each cow, or a file card for loose cattle.
2. A heat expectancy chart.
3. A note board or blackboard for day-to-day messages.
4. A notebook or card file for health records.
5. The breeder's chart of cattle bred.

Anything in addition to these, unless it is a tiny pocket notebook, is only something to take up time and complicate matters. All of these records should be in the barn where the veterinarian, inseminator and the hired man can find them and use them every day.

The next time you wake early because of the silence of a new snow, I hope you don't have any plans to make except for Christmas. And let's hope and pray that a silence will cover the whole world this Christmas, not just because of snow, but because the noise of war will have ended, and that the voices of dissent will be silenced by the sounds of church bells and children laughing.

Editor's note: In the November issue, Doc Mettler commented on bovine hoof care . . . and wrote that the cow walks on "the tip of her second and third digit." Subsequently, he checked the textbooks, and reports . . . in the interests of professional accuracy . . . that it should have read "the third and fourth digit!

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Next year the picturesque little village of Oberammergau will play host to thousands of people who are there to see the famed Passion Play.

Don't miss the PASSION PLAY!

At the beginning of each new decade, the sleepy little town of Oberammergau in picturesque Bavaria becomes a beehive of activity, as people from all parts of the world descend upon it to see the famed Passion Play. It used to be said that "all roads lead to Rome," and once every ten years, all roads lead to Oberammergau!

Perhaps you have heard that all performances for the 1970 Passion Play are sold out, but way back in 1967, our tour agents, the Travel Service Bureau of Needham, Massachusetts, were thinking about **American Agriculturist** readers who would want to see the Play next year. They reserved 180 seats (30 for each of six different performances) and have planned six wonderful European vacations around these dates.

Choose the part of Europe you most want to visit, and included will be your reserved seat for the 1970 Oberammergau Passion Play. Following are very brief resumes of these six tours:

Southern Europe, May 6–27. We fly to Geneva and travel southward through the French Alps to the French and Italian Rivieras – then on to Rome, Naples, Sorento, and the Isle of Capri. Changing directions, we visit Florence and Venice, cross the Italian Dolomites on our way to Austria and southern Germany. Our Passion Play tickets are for May 25.

Scandinavian Holiday, June 2–23. Springtime in Scandinavia when the days are longest in the Lands of the Midnight Sun! First we enjoy a few days in Switzerland, attend the Passion Play on June 8, and then fly to Copenhagen, Stockholm, and Oslo for sightseeing and shopping. The climax of our trip is six delightful days traveling through the sparkling Norwegian Fjord District.

Northern Europe – June 24–July 15. We fly to London and see many of its historic sites, including Windsor, Canterbury, and Dover. Belgium, Paris, the famed Chateaux District of France, and Switzerland follow. We see the Passion Play on July 10 and then enjoy a fascinating cruise on the Rhine River, past fabled castles and lush vineyards. Two exciting days in Holland complete this vacation, which is a perfect one, especially if you've never been to Europe.

Grand Alpine Holiday, August 5–26. We offered this tour for the first time last year, and it was an immediate hit. It's a trip featuring magnificent scenery – mountains, lakes, chalets, and picturesque villages. Vienna is the only really large city we will visit. A few other highlights of this vacation are Lake Geneva, Zermatt and the Matterhorn, Interlaken and the Jungfrau, Lucerne, St. Moritz, the Italian Dolomites, Austria, a cruise on the Danube River, Salzburg, and of course the Passion Play on August 24.

Spain and Portugal, September 6–27. Two and a half weeks visiting all the interesting spots in these two delightful countries, with a side trip to Oberammergau for the Passion Play on September 25. We will visit Lisbon,

(Continued on next page)

Gordon Conklin, Editor
Box 370-T
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Grand European Tour, August 20–October 1. Our "Grand" European Tour is just what the name implies. It's a delightful, six-week, vacation-of-a-lifetime to England, Belgium, Switzerland, Italy, Austria, Germany, and Holland at a leisurely easy-to-take pace and with plenty of time to enjoy all the attractions in each country we visit. We will attend the Passion Play on September 14.

We have reserved round trip accommodations aboard the Queen Elizabeth 2, but arrangements can be made for you to fly either or both ways if you prefer. Our tour escort will be aboard ship to take care of all tipping, deck chair arrangements, etc., so you can relax and enjoy every moment of your vacation.

Folders describing each of these European tours and giving complete cost information will be available during the winter months. Since space on each tour is limited, we would suggest that you write today for our Oberammergau Folder and then send in a deposit of $50 to tentatively reserve a place on the trip you choose.

Don't Forget!

Just a reminder of other AA tours planned for the coming months:

Southwest Holiday, January 12-30, and including San Francisco, 17-Mile Drive, Solvang, Death Valley, Las Vegas, Grand Canyon, Phoenix, San Diego, and Los Angeles.

Winter Wonderland, February 6–24. Unique winter tour to Alaska! See Yellowstone, Mt. Hood and Mt. Rainier before flying to Alaska and the Arctic. This is Fur Rendezvous time in Alaska, similar to Mardi Gras in New Orleans and Aloha Week in Hawaii, with special events of every kind.

Caribbean Cruise, February 7-20. Leave the winter blues behind, as you sail the blue Caribbean aboard the SS Raffaello. This beautiful ship has every feature imaginable for your enjoyment — swimming pools, auditorium-cinema, gymnasium, acres of deck space, gourmet meals, and luxurious staterooms. Ports of call will be St. Thomas, Martinique, Curacao, Grenada and St. Maarten.

South Pacific Holiday, March 19–April 24. Spend five weeks in Paradise; visit Tahiti, Bora Bora, New Zealand, Australia, Fiji, Samoa, and Hawaii. Truly this is a once-in-a-lifetime experience!

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All American Agriculturist tours are arranged by our tour agents, the Travel Service Bureau of Needham, Massachusetts, and are escorted, "all-expense" trips, with practically everything included in the price of the ticket. Fill out the coupon and mail it today; we'll send at once the itineraries which interest you.

Dates to Remember

Nov. 28-Dec. 4 - 4-H Club Congress, Chicago, Ill.

Nov. 29-Dec. 7 - International Livestock Show, Chicago, Ill.

Dec. 2-3 - New England Farm and Power Equipment Dealers Convention and Trade Show, Sheraton-Wayfarer Motor Inn, Manchester, N.H.

Dec. 2-3 - Poultry Servicemen's Clinic, Ithaca, N.Y.

Dec. 3-5 - National Potato Council Annual Meeting, Commodore Hotel, New York, N.Y.

Dec. 5-6 - National Onion Association Annual Meeting, Sherman House, Chicago, Ill.

Dec. 6 - New York Hereford Association Annual Heifer Sale, Finger Lakes Livestock Market, Canandaigua, N.Y.

Dec. 7-11 - National Junior Horticultural Association 35th Annual Convention, Hotel Sheraton Lincoln, Indianapolis, Ind.

Dec. 8-9 - Cornell Seed Conference, Ithaca, N.Y.

Dec. 10 - Regional Corn Congress for Farmers, Firemen's Recreation Hall, Alexander, N.Y.

Dec. 11 - Regional Corn Congress for Farmers, Geneva, N.Y.

Dec. 13 - New York Shorthorn Association Annual Meeting, Canandaigua Inn, Canandaigua, N.Y.

Dec. 17 - Pennsylvania Milk Marketing Referendum.

Dec. 19 - Outlook Conference for Educators, Cornell University, Ithaca, N.Y.

Dec. 22 - Outlook Conference for Agribusiness Personnel, Cornell University, Ithaca, N.Y.

Jan. 5-8 - New York Nurserymen's Convention, Kiamesha Lake, N.Y.

Jan. 7-8 - New England Fruit Meeting and Trade Show, New Hampshire Highway Hotel, Concord, N.H.

Jan. 7-9 - Northeast Weed Control Conference, New York, N.Y.

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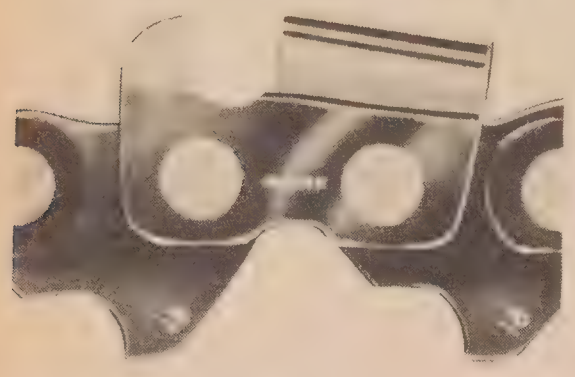

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Dollar Guide

For The Northeast Farmer

INCOME TAX management should take into account the likelihood that surtax (now 10 percent) may be reduced or eliminated next year ... making it an advantage to manage taxable income so there is more in 1970 than 1969.

However, investment credit may be cut out by Congress retroactive to some date in 1969 ... farmers who have made substantial purchases of qualifying property may want to manage taxable income to be higher in 1969. (See page 10 for more information on tax management.)

MILK MARKETING referendum date is December 17 in Pennsylvania. Proposal would assess dairymen one-half of one percent of the gross value of milk sold, to be used for milk marketing development program.

U.S. EGG PRICES (for 12 months beginning October 1, 1969) are predicted by Poultry Survey Committee of American Feed Manufacturers Association to average about 3 cents a dozen below previous 12 months.

SUGAR BEET acreage quotas have been announced by the USDA for 1970. For the Northeast, they are: Maine - 19532, New Jersey - 872, New York - 15638, and Pennsylvania - 1000. Individual farm bases will be established within each state.

CENSUS OF AGRICULTURE forms will be mailed out in January, 1970 ... first time it will be conducted by mail. Information collected is important to agribusiness people, to public agencies, and ... most important of all ... to farmers themselves.

Fill it out, and mail it back!

BUILDING PLANS for a wide variety of farm buildings are available at nominal prices from: Agricultural Engineering Extension, Riley-Robb Hall, Cornell University, Ithaca, New York 14850 ... or from: Midwest Plan Service, Agricultural Engineering Building, Iowa State University, Ames, Iowa 50010. Send to either address for list of plans available; specify type of building about which you are interested.

BRUCELLOSIS VACCINATION in New York State must now be limited to female calves between 3 and 8 months of age (90-239 days).

GETTING COWS into milking parlor without grain feeding there has posed a problem to some dairymen. One reports success with using molasses blocks in the parlor for "teasers" to entice 'em in.

The Song of the Lazy Farmer

To save my life, I cannot see why neighbor keeps on needling me about the way I operate; he says I'm so far out-of-date that kids could tour my place and see how things were done in nineteen-three. He shakes his head when I protest that I just like old ways the best; he shudders when I add, by jing, that profit isn't ev'rything. "Oh, sure," he answers, with a smirk, "but don't tell me you like to work; and if you'd operate the way our smartest college experts say, you'd get things done more easily in lots less time than formerly."

To match that guy for being dumb, you'd surely have to hurry some; for years he's lived right next to me but still don't know, apparently, that it's my system, 'stead of his, that saves the worker most, gee whiz. The picture shows where I am at right now, but I will bet a hat that neighbor's out there in the cold, he's getting tired and growing old while running all the projects which the college says will make him rich. I'll grant he toils the modern way, but still he's working ev'ry day; it's poor, old-fashioned me, instead, who's saving back and using head.

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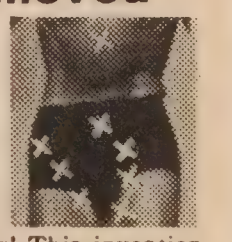

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UNIONIZATION OF FARM WORKERS

by Amos Kirby
New Jersey Editor

THE most discussed subject among New Jersey farmers in the closing days of 1969 is the labor question. This has been a year when the labor force declined even in the face of higher wages and improved fringe benefits.

The supply of southern workers has been at the lowest level in many years. The Mexican-American workers have left a mixed opinion. There has been an increase in workers from the cities . . . who have been satisfactory in most instances . . . between the time the city schools close in June and open in September. In view of the decline in number of Puerto Rican workers, growers are turning their attention to Jamaicans, but here one gets involved in an international problem.

Charles Yersack, of the Bureau of Migrant Labor, has stated that the problems of migrant farm workers will never be solved to his satisfaction until they are unionized. This throws a controversial issue into the farm labor situation in the Garden State.

The situation can be summed up in the comments of one large grower who has this year used Puerto Ricans, Mexican-Americans, migrants and workers from nearby cities. As he sees it, farmers are being forced to turn to crops that call for a minimum of labor. This calls for the use of mechanical equipment, especially harvesters. Those who are turning to mechanical harvesters say it is not a case of replacing workers, as there are already so few.

Unionization of the various farm labor groups brings up these questions: Will unionization bring an ample supply of workers? Will the workers stick on the job until the crop is harvested and abide by a "no-strike" clause in any contract?

BULK HANDLING

About half the tomatoes grown in 1969 for the Campbell Soup Company's Camden plant were delivered in bulk, and the balance in pallets . . . none in baskets, the customary package used for decades.

Most growers and processors agree that bulk delivery is the system for the future. Specially-constructed truck bodies carry 10 to 15 tons with little crushing of the fruit, and the load can be flushed from the truck with water in a matter of minutes.

Advantages, from the farm point of view, are: fewer packages needed to move the crop from the farm; fewer loads upset along the highways due to traffic problems; and less time in unloading at the processing plant.

For smaller plants lacking Campbell's capacity, pallet boxes have an advantage. They may be unloaded at the plant and stacked to provide an adequate supply to maintain a steady operation for the processing lines.

Plants equipped to handle the pallet boxes will continue, as they have proven to be far more satisfactory . . . to both the grower and the processor . . . than the baskets.

FOWL MARKETING

The New Jersey Agricultural Marketing Association's fowl marketing program now appears to be a reality. Aimed at providing a ready market for "spent" fowl, the goal is for one million birds. More than 300,000 have been signed, another 400,000 have been pledged, and the balance is available.

Participation is planned with the Farmers Agricultural Cooperative Trading Society (FACTS), a program in effect in Massachusetts for the past five years.

The "spent" fowl from poultry farms is an item with a stormy past. Now, with a pledged market at a uniform price, the venture offers a bit of sunlight for egg producers.

PROMOTION PAYS

Advertising and promotion has brought new life to south Jersey's sweet potato industry . . . on the verge of disappearing after 140 years or more as a source of steady income in the Delaware River Valley.

Through the efforts of the state's Sweet Potato Industry Commission, and the leadership of Joe Lynch of the State Department of Agriculture . . . plus funds supplied by growers . . . the market expanded, demand increased, and the one-time tax money crop came back to life.

As a result of the successful 1968 marketing season, the acreage was increased in 1969 and the outlook is excellent for further expansion in the market.

WHITE SWEET CORN

Some consumers prefer sweet corn white and others prefer it yellow. Test your trade in 1970. Some markets will pay as much as a 10 cent premium for the white.

ALFALFA WEEVILS

"The finest alfalfa crop in years" is the report from areas where the alfalfa weevil once threatened to force growers to turn to other forage crops.

A tiny parasitic wasp has killed off a heavy percentage of the weevils. On many farms, this has eliminated the necessity of spraying and the possibility of the milk being affected by the presence of the pesticide used to control the weevil.

AIR POLLUTION

Herb Johnson, Penn State Extension poultry specialist, suggests that the dust or air pollution in the hen house comes from tiny particles that break off the feathers and float around.

Removing these feather particles involves a 60-80 percent humidity, and a ventilation system that removes the litter dust and feather particles from the air. The recommended humidity level keeps the birds healthy and prevents their feathers from becoming brittle.

MOVING DAY

By July 1970, the Rutgers Dairy Research Center at Beemerville, in Sussex County, will be moved to New Brunswick. Dean Leland Merrill, Jr. points out that the interests of dairymen will be better served by bringing all research to one center.

The Beemerville property will be maintained, however, and forestry work will be continued there.

STAKED TOMATOES

A Cape May County roadside market operator finds that staking tomatoes enables him to pick from the same vines from early July until October.

FUNK'S G HYBRID

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SILAGE CONTEST WINNERS AGAIN!

For the third straight year, Funk's-G silage took first place in the Pennsylvania Forage Progress Days competition. Forage analysis was considered along with other key factors.

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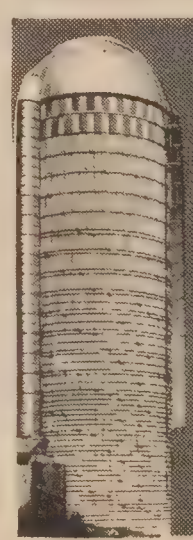

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Mrs. Emily Pierce WIN

It's a thrilling experience to learn you have been declared "champion Grange baker in New York State," and it's an experience that usually leaves the winner speechless! Mrs. Emily Pierce of Wadhams Grange in Essex County, No. 1 winner of the American Agriculturist-New York State Grange Yeast Bread Contest for 1969, was no exception. "I'm just overwhelmed," she said when I phoned her the good news.

Mrs. Pierce didn't think she would be able to come for the announcement of baking contest winners at State Grange Session, but when other members of her Grange learned about her winning, they realized what an honor this was for Mrs. Pierce and insisted on bringing her to Albany. The Pierces are dairy farmers and have been Grange members for more than 40 years.

Mrs. Pierce says she can't remember when she hasn't baked bread! She has been a foods leader in 4-H Club for 23 years, and I envy all those young folks their good teaching.

As the No. 1 winner, Mrs. Pierce had her choice of the ten grand prizes and chose the Magic Chef Dishwasher which had been given by **Agway, Inc.** She also received an electric corn popper from **International Salt Company,** $48.00 in cash, plus the following prizes which were given to each of the ten high winners:

From **Curtice-Burns, Inc.** — A case of Blue Boy vegetables and a box of Ritter Brand products.

From **Dairylea Cooperative, Inc.** — A Dairylea Gold Box Cheese Assortment.

From **International Salt Co.** — 6 packages of Sterling Table Salt.

From **Revere Copper and Brass Inc.** — A 1-quart Revere Ware Saucepan.

From **Standard Brands Incorporated** — A gift box of Standard Brands products.

This year's cash prizes included $50.00 given to the top three winners by Standard Brands, Inc., makers of Fleischmann's Yeast, a $3.00 entry prize from New York State Grange to each county winner entering the finals, and $107.00 from American Agriculturist, distributed among the top 25 winners.

Winner No. 2

Second-place winner Mrs. Robert Kenville, a member of Guyanoga Valley Grange in Yates County, was attending State Grange Session with her husband. She said she looked over the 25 winning loaves of bread and thought the No. 2 loaf looked like hers, but didn't dare hope it was!

Mrs. Kenville has also baked bread for many years and never bothers to measure ingredients (Mrs. Pierce confided this same thing about her bread making). She had to make several batches in order to get a recipe to submit with her entry. The three Kenville children and their families were her "taste test panel" and helped to get just the right combination of ingredients that won second prize from among the 51 loaves entered in the contest.

Mrs. Kenville's first choice of grand prizes was the Singer Sewing Machine, a gift from **New York State Grange.** She will also receive $33.00 in cash and the miscellaneous prizes.

Yeast Bread Contest winners present when pictures were taken at State Grange Session: First row, Mrs. Frank Getman, Mrs. Robert Kenville, Mrs. Newton Harmon, and Mrs. Emily Pierce; Second row, Mrs. Betty Barnes, Mrs. Elsie Jager, Mrs. Roy Hoad, and Mrs. Kenneth Gaylord; Third row, Mrs. Clara Hermance, Mrs. Lester Hyatt, Mrs. Harry Kelsey, and Mrs. Roy Vaughn.

Winner No. 1, Mrs. Emily Pierce, had her choice of the ten grand prizes and chose the Magic Chef Dishwasher which had been given by Agway, Inc.

Third-place Winner

Mrs. Elsie Jager of Florida Grange in Montgomery County was found to be winner No. 3 and chose the beautiful "Jet-Fan" Convection Oven Monarch Electric Range, a gift from **Monarch Range Company** in Beaver Dam, Wisconsin, for her grand prize. She will receive $24.00 in cash and, of course, all prizes given to the top ten winners.

Mrs. Jager has belonged to the Grange for 18 years and is a Seventh Degree member. She learned to make bread when it was a New York State Extension project a few years ago. Mrs. Jager is a widow, has three married daughters, three grandchildren, and is active in her church. She has also taught foods in 4-H.

Winners 4, 5, and 6

Winner No. 4, Mrs. Roy Hoad from Wayne County, was also at State Grange and took home the Portable Television Set which had been given by State Grange. Mrs. Hoad was 10th place winner in last year's Doughnut Contest.

Mrs. Hoad's bread narrowly missed being eaten by their Dalmatian dog! The bread and a pan of rolls made at the same time were cooling on a counter. The dog managed to get the pan of rolls off the counter and was having a grand time when Mrs. Hoad discovered him. She swatted him soundly with the pan, got him out of there in a hurry, and breathed a sigh of relief that he preferred rolls to bread!

Chenango County's winner, Mrs. Betty Barnes, came in fifth and received the lovely 64-piece

Second-place winner, Mrs. Robert Kenville received as a grand prize the Singer Portable Sewing Machine, as a gift from New York State Grange.

Three judges worked many hours to score each of the 51 loaves of bread entered in the state finals. Left to right in picture are Dr. Pearl Campbell who is with the Home Economics Division of the State Education Department; Mrs. Dorothy Hewlett, Senior Nutritionist with the State Department of Agriculture and Markets, and Mrs. Ruth Gagnon, a Dietary Consultant.

EAST BREAD CONTEST!

by Augusta Chapman, Home Editor

Mrs. Elsie Jager, winner No. 3, selected the "Jet-Fan" Convection Oven Monarch Electric Range for her grand prize. This was given by Monarch Range Company. At left in the picture is Mrs. Lester Hyatt who won the Monarch Range in our 1957 Yeast Bread Contest. She is still using the stove and gave Mrs. Jager some suggestions for using her first electric range.

set of Syracuse China in Wedding Ring pattern as a gift from **Farmers and Traders Life Insurance Company.**

Possibly, no other person in the contest baked so much bread getting ready — Mrs. Barnes made 22 loaves the week before the contest and 22 loaves the week before that, even baking some in a neighbor's oven to see if it browned better. She entertained her Home Bureau Chapter, and what did they have for refreshments? Why, homemade bread, of course, and each member told Betty how she felt the bread could be improved. The loaf which won 5th prize had been in the freezer a week.

We were sorry that 6th place winner Mrs. Vernon June from Ulster County was in a committee meeting and didn't get in the group picture. Mrs. June is also a two-time winner, having placed second two years ago in the Filled Cookie Contest. She received the 50-piece set of Oneidacraft Deluxe Stainless from **Oneida Ltd. Silversmiths** for her grand prize.

Fourth-place winner was Mrs. Roy Hoad. She received the Singer Portable Television Set from New York State Grange.

Other High Winners

Winner No. 7 was Mrs. Frank Getman from Carthage Grange in Jefferson County. Mrs. Getman came to State Grange and took home the pretty Community Coffee Service, a gift of **National Grange Mutual Insurance Company.**

25 TOP WINNERS

1. Mrs. Emily Pierce, Wadhams Grange, Essex Co.
2. Mrs. Robert Kenville, Guyanoga Valley Grange, Yates Co.
3. Mrs. Elsie Jager, Florida Grange, Montgomery Co.
4. Mrs. Roy Hoad, Newark Grange, Wayne Co.
5. Mrs. Betty Barnes, Norwich Township Grange, Chenango Co.
6. Mrs. Vernon June, Asbury Grange, Ulster Co.
7. Mrs. Frank Getman, Carthage Grange, Jefferson Co.
8. Mrs. Ethel Reese, Crum Creek Grange, Fulton Co.
9. Mrs. Loraine Oddy, North Granville Grange, Washington Co.
10. Mrs. Frances Snyder, West Danby Grange, Tompkins Co.
11. Mrs. Bernard Fleury, Westville Grange, Franklin Co.
12. Mrs. Harry Kelsey, East Pembroke Grange, Genesee Co.
13. Mrs. John Parsons, Rome Grange, Oneida Co.
14. Mrs. Harry Lawrence, Seneca Grange, Seneca Co.
15. Mrs. Lionel Pierce, Heuvelton Grange, St. Lawrence Co.
16. Mrs. Roy Vaughn, Schuyler Falls Grange, Clinton Co.
17. Mrs. Lester Hyatt, Flemingville Grange, Tioga Co.
18. Mrs. Newton Harmon, Gifford Grange, Schenectady Co.
19. Mrs. Kenneth Gaylord, Enterprise Grange, Ontario Co.
20. Mrs. Eleanora Winch, Buffalo Valley Grange, Wyoming Co.
21. Mrs. Richard Wise, Borodino Grange, Onondaga Co.
22. Mrs. Denton Burroughs, Mansfield Grange, Cattaraugus Co.
23. Mrs. Henry Kading, Washington Grange, Dutchess Co.
24. Mrs. Dorothy Hill, Bethlehem Grange, Albany Co.
25. Mrs. Clara Hermance, West Sand Lake Grange, Rensselaer Co.

Camera Outfit as a gift from **General Aniline & Film Corporation,** and winner No. 10 was Mrs. Frances Snyder of West Danby Grange in Tompkins County. She won the 16-piece starter set of Calypso Casual China, given by **Syracuse China Corporation.**

Many People Helped

Mrs. Harry Howard from Phelps, New York, chairman of the State Grange Committee on Women's Activities, and I directed the Yeast Bread Contest for the state. We were assisted by another member of the State Committee, Mrs. Frank Stearns of Central Square, New York, and by hundreds of Pomona and Subordinate Grange Committee chairmen. I wish it were possible for all of these women to be at State Grange Session and see how pleased and appreciative the winners are, for it's then you feel all the work is really worthwhile!

Mrs. Betty Barnes, winner No. 5, chose the set of Syracuse China in Wedding Ring Pattern. This was given by Farmers and Traders Life Insurance Co.

Mrs. Ethel Reese, a member of Crum Creek Grange in Fulton County, was winner No. 8 and won the Osterizer Cyclomatic Blender which had been given by **International Milling Co., Inc.** Mrs. Reese came to State Grange, but arrived too late to be included in the picture.

9th place winner Mrs. Loraine Oddy, a member of North Granville Grange in Washington County, won the 326 Anscomatic

Our 1970 American Agriculturist-Grange baking contest will feature apple pie, and very soon every Subordinate Grange in the state will have complete information about the contest. Plan now to enter, and you may be one of the top winners at next year's State Grange Session!

MRS. PIERCE'S WHITE BREAD

1 quart milk, scalded and cooled to 90 to 105°
¼ cup lard
¼ cup sugar
1 tablespoon salt
2 packages dry yeast, dissolved in
½ cup rather warm water
10 to 12 cups all-purpose flour

Combine milk, lard, sugar and salt. Add 2 cups flour and stir until smooth; add yeast. Then add flour 1 cup at a time until too stiff to stir; knead in remaining flour, about ½ cup at a time. Knead until satiny smooth and elastic.

Coat with small amount of salad oil, cover with cloth, and let rise about 30 minutes. Punch down. Let rise until doubled in bulk. Punch down on oiled board and cut in 4 parts (3 if extra large loaves are desired).

Knead in balls and let rise again about 30 minutes. Shape into loaves and put in pans. Let rise until doubled in bulk. Bake 35 to 45 minutes in 350° oven. Cool.

Editor's Note: This year's American Agriculturist-New York State Grange Yeast Bread Contest was won by **Mrs. Emily Pierce, R.D. 2, Westport, New York.** Mrs. Pierce is a member of Wadhams Grange in Essex County. This recipe is printed just as Mrs. Pierce gave it to me at State Grange Session. At the end of the recipe, Mrs. Pierce said, "I put bread in cold oven and set temperature at 350°, but this is optional. Many prefer to heat oven first."

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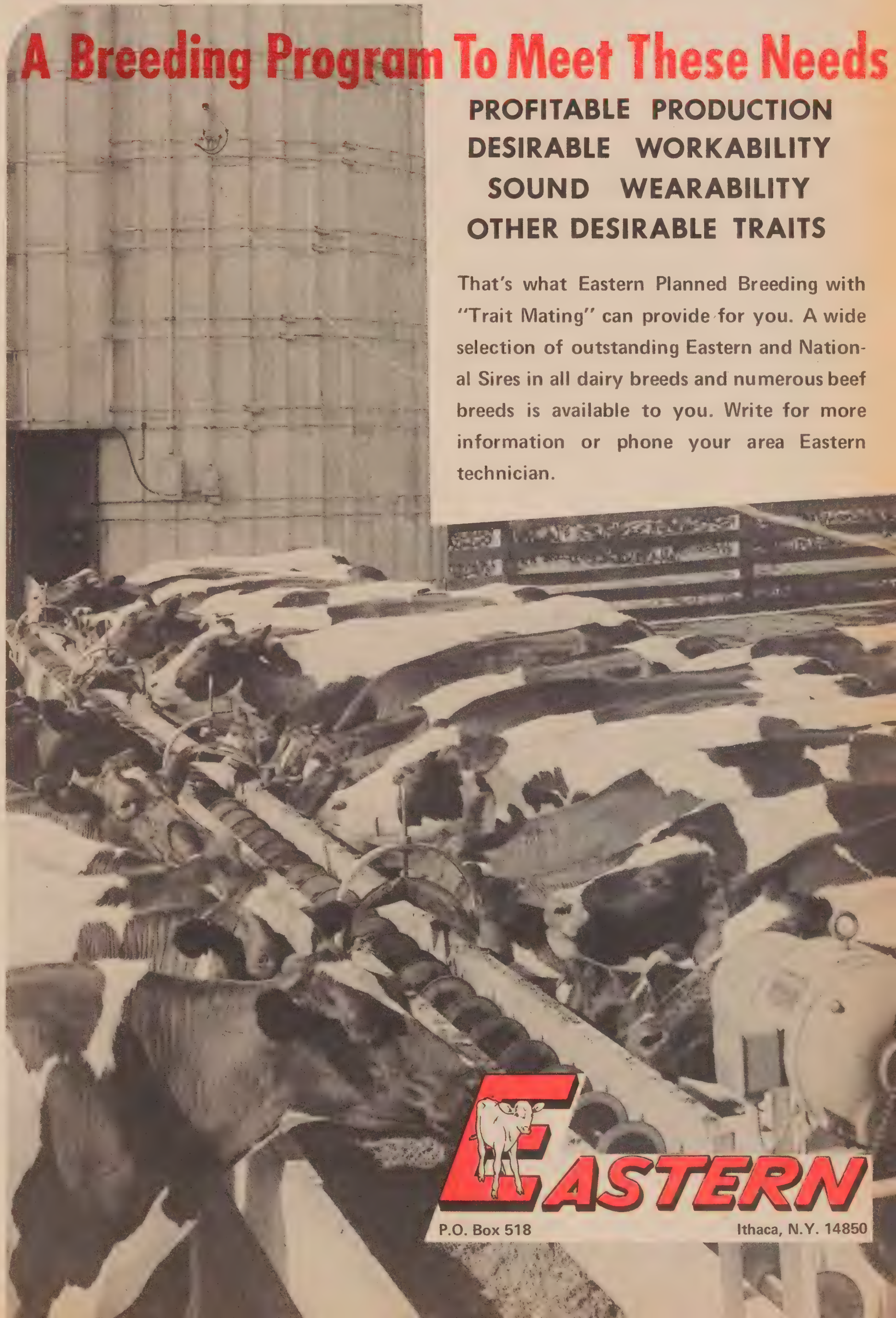

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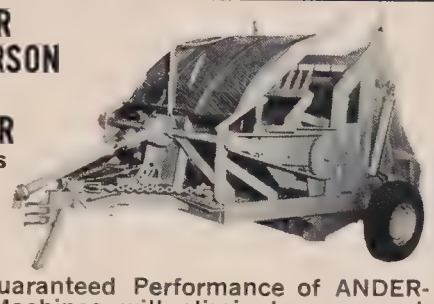

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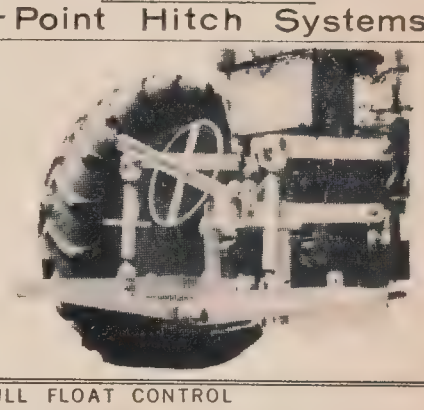

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Christmastime REFRESHMENTS

by Alberta Shackelton

Jingle bells! Jingle bells! Teas, coffees, receptions and social times following meetings are never gayer than during the Christmas season. Bright decorations everywhere, attractively set tables with offerings of tea and coffee, cold or hot (Wassail) punch, or egg nog and a wide assortment of goodies — cookies, fruit cake, candied fruit peels and glazed nuts are all to be admired and enjoyed.

The following cookie recipes from other lands will be some of those featured for refreshments early in December when a friend and I serve as hostesses. Some Ithaca friends in the group — Mrs. W. T. Stevens (Helen), Mrs. J. D. W. Fetter (Bess), and Mrs. W. W. Mendenhall (Ione) share their special recipes with us.

BESS' SCOTCH SHORTBREAD

1 cup butter, well creamed
½ cup confectioners' sugar
⅓ cup cornstarch
2 cups cake flour

Combine creamed butter and sugar until light and fluffy. Combine and stir well or sift together the cornstarch and flour; stir into the creamed mixture. Chill. Roll dough out to about ¼-inch thickness between sheets of waxed paper.

Cut in small diamond shapes (or other fancy shapes as desired) with pastry wheel. Place on ungreased cookie sheets, prick with a fork, and bake in a slow oven (275°–300°) 20 or 25 minutes, until cookies are dry but **not more** than delicately browned. Makes about 2½ dozen.

Note: If you wish to make Shortbread Fans, cut circles of dough with a 3-inch scalloped cookie cutter and quarter. Mark each quarter with back of knife like a fan.

BESS' ENGLISH BANBURY TARTS

Recipe of your best rich pastry, using 1½ cups flour
1 cup currants
½ cup water
1 cup sugar
2 tablespoons butter
1 beaten egg
1½ teaspoons vanilla

Roll out pastry dough and cut in rounds with a scalloped cookie cutter about 3½ inches in diameter. Line small muffin cups with pastry rounds, forming them to fit with the fingers.

Wash and drain currants. Combine with water and sugar and simmer until most of the water is simmered away. Remove from stove and add butter. Partly cool and stir in the beaten egg and vanilla. Place 1 teaspoon of the mixture in each of the lined muffin cups.

Bake in a hot quick oven (400°) about 10 minutes, or until pastry is lightly browned and filling set. Remove to rack to cool. Makes about 2 dozen.

Variation: Cut rolled pastry in 3½-inch squares. Place a teaspoon of the currant mixture on each square. Moisten edges of pastry and fold, bringing edges together and pressing with fork dipped in flour. Bake about 15 minutes in hot oven (450°).

IONE'S FRENCH MERINGUES

1 cup sugar
½ cup water
¼ cup egg whites (2)
¼ teaspoon almond extract
¼ teaspoon vanilla
½ cup ground blanched almonds

Combine sugar and water, bring to boil, and boil until a hard, almost brittle ball of sirup is formed in cold water (265° on a candy thermometer). Beat egg whites until stiff and pour hot sirup over them gradually in a fine stream and with constant beating. When the mixture holds its shape, fold in flavorings and almonds.

Drop by teaspoonfuls onto a well greased cookie sheet (it may also be lightly dusted with cornstarch) and bake in a slow oven (250°) about 15 minutes. Makes 50 meringues.

HELEN'S SWEDISH ROSETTES

2 eggs
1 tablespoon sugar
¼ teaspoon salt
1 cup all-purpose flour
1 cup milk
1 teaspoon vanilla extract

Combine eggs, sugar, and salt and beat well. Add flour, milk and vanilla extract and beat until smooth. Put shortening or salad oil in small, deep pan to depth of 2 to 3 inches (to cover rosette iron completely) and heat to 375°.

Place iron in hot fat for 2 minutes. Remove, shake excess fat from iron, and dip into batter to about ¼ inch from top of iron. Place in hot fat and fry ½ to 1 minute, or until delicately browned. Lift out and turn iron over to drain. Gently push rosettes off iron onto absorbent paper.

Reheat iron 1 minute before making each rosette and stir batter well each time before dipping in iron. Sprinkle rosettes with confectioners' sugar for serving. Makes about 2 dozen.

Note: A rosette iron set is available in most department stores. A timbale form is usually part of the set and may be used for making timbales for serving creamed mixtures.

Photo: General Foods Kitchens

Pictured here are mincemeat surprises, fruit–cereal bars and crisp lemon cookies. A pretty glass jar filled with cookies that do not break easily makes a perfect gift for some shut-in or bachelor friend.

HELEN'S SCANDINAVIAN FATIGMAN

2 eggs
½ cup sugar
4 tablespoons butter, melted
1 tablespoon cream
¼ teaspoon cardamom (optional)
2½ cups flour

Mix eggs and sugar thoroughly. Stir in melted butter and cream, then the flour and the cardamom, if used. Chill dough thoroughly. Roll dough to thickness of pie crust. With a pastry wheel, cut in diamond-shaped pieces about 4½×2 inches in size.

Make a 1-inch slit in the center of each diamond and draw a long point of diamond through slit and curl back in opposite direction. Fry in deep fat heated to 350° or 375° until delicately brown; turn only once to brown second side. Drain on absorbent paper. Sprinkle with confectioners' sugar for serving. Makes about 75. These goodies are sometimes called Danish fried cakes or Christmas Crullers.

BERLINER KRÄNZE FROM NORWAY

¾ cup butter
½ cup sugar
1 teaspoon grated orange rind
1 egg
2 cups all-purpose flour
1 egg white
2 tablespoons sugar

Combine butter, sugar, rind and egg and mix well. Mix in flour; chill well. Break off small pieces of dough and form each into a roll about 6 or 7 inches long and pencil thin. Form each piece into a circle or wreath, crossing ends at top and leaving ½ inch on each side. Place on ungreased baking sheet.

Beat egg white stiff, add sugar gradually, and beat until peaks form. Brush top of each circle with meringue and sprinkle with chopped candied cherries and bits of citron for holly berries and leaves. Bake in a quick hot oven (400°) about 10 to 12 minutes, or just until set. Colored sugar may be used in place of the cherries and citron. Makes about 2 dozen wreaths.

MINCEMEAT SURPRISES (U.S.A.)

¾ cup butter
1¼ cups firmly packed light brown sugar
1 egg
1 teaspoon vanilla
3½ cups cake flour
2 teaspoons baking powder
½ teaspoon salt
2 tablespoons milk
1 cup moist mincemeat
¼ cup firmly packed brown sugar
½ teaspoon favorite flavoring

Cream butter and 1¼ cups brown sugar together until light and fluffy. Add egg and vanilla and beat well. Sift together the flour, baking powder and salt and add alternately with the milk, a small amount at a time and beating well after each addition. Chill thoroughly.

Combine mincemeat, sugar, and flavoring. Roll dough ⅛ inch thick, a small amount at a time, on lightly floured board. Cut into circles with a 2½-inch cookie cutter. Place half of the cookies on ungreased baking sheet. Place one teaspoonful of the mincemeat mixture in center of each and spread out to within ¼ inch of edge.

Cut small star-shaped hole in center of each remaining cookie and place on top of filling, pressing edges together to seal. Bake in hot oven (425°) 8 to 10 minutes, or until lightly browned. Makes about 3½ dozen cookies.

HOLIDAY PLANT CARE

by Doc and Katy Abraham

It's safe to say that possibly three out of every four American Agriculturist readers will get a **Poinsettia** for Christmas. You'll get more mileage from your plants if you understand their habits. The Poinsettia likes a uniform supply of water, a cool, bright window (no direct sunlight), and a temperature of 70 degrees or so. Pink and white Poinsettias last longer than the traditional red ones, although some newer reds will last 6 or 8 months.

Christmas Cherry – This holiday novelty plant likes plenty of water and a bright window. Keep it as cool as possible. Orange berries drop naturally as they ripen. Caution: **Fruit is poisonous!** After flowering and fruiting is over, continue to grow the plant in a bright window, and when May rolls around, set the plant outdoors. If the Cherry is scraggly, prune it back for bushiness before setting outdoors.

During the summer, it needs regular watering. In fall (before frost) bring the plant indoors and grow in a bright window. You can also save seeds from the orange fruit and plant them in March. After that the plants can be transplanted to garden and left until early September.

Christmas Pepper – This flashy little annual with red and white peppers is an eyestopper. Peppers are edible, but go easy, as they are real hot! Cut the plant back and grow it over again, or save seed and sow in June. Grow the seedlings in pots and set them out in the garden.

The **Cyclamen** likes a cool, bright window away from direct sunlight. At night it needs a temperature of 50 degrees. Leaves turn yellow and buds blast if temperature is above 70 degrees, and if the cyclamen does not get enough light, the foliage will turn yellow.

A lack of water will also cause leaves and flowers to droop. Once drooping sets in, water the plant thoroughly by setting pot in a pan of warm water. Leaves and blossoms will perk right up.

After flowering, keep the plant slightly on the dry side until June, when the pot can be set outside and left until fall. As soon as a new shoot starts, it's a signal to start the plant up again. Put it in a cool, bright window and keep it watered.

Christmas Begonia likes an ample supply of water and a bright window, but not direct sunlight. After flowering, reduce the amount of water, cut top back about half or more, and store plant in cellar. Keep soil dampened but never soggy. In April repot in soil containing leaf mold and peat. Grow in bright window all summer. Flower drop is natural due to maturity, but may also be caused by poor light or high temperature.

Azaleas grow best in a bright window and need a uniform supply of water. After flowering, plants may be kept in light window where they will continue to grow. In spring (shirtsleeve weather) put pots in a shaded spot in the garden and keep watered during summer months.

If soil seems poor and leaves are yellowish, repot and use plenty of peat moss and sand. An acid soil is needed for growing azaleas, so use plenty of peat. Watering the plant with a vinegar solution (1 teaspoon to a quart of water) will acidify the soil.

Before frost in fall, bring the plant indoors, place in cool, well lighted room where it won't freeze. A bedroom window is ideal for getting buds to develop, since it is cool there. About January 1, bring the plant into the living room to flower.

Start Your Own Geraniums

Many AA readers who brought their geraniums indoors for the winter now find the plants are getting a bit tall and scraggly. Pinch or cut off the tips and root these cuttings in a pot of sand and peat moss; you'll have some nice plants for Memorial Day. It takes a cutting about three weeks to root. After that, plant them in a mixture of one-third each sand, peat and loam. Grow in a bright window and keep the soil moistened at all times.

(Continued on page 29)

OUR SAVIOUR'S BIRTH

by Roy Z. Kemp

There is a song of praise and worship
That fills each heart at Christmastime.
It speaks of love beyond our telling;
It speaks of love that is sublime.

The shepherds were the first to hear it,
This song, in far-off Eastern skies.
Now, every land has heard the message
Of this great song that never dies.

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Its harmony is sweet and strong.
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Plant . . . . .

(Continued from page 27)

Garden Clinic — A reader writes, *"We're planning on landscaping our home this spring. We want evergreens and shrubs which need no pruning and hope you can help us."*

Answer: All shrubs and evergreens need some pruning for best show. There are dwarf types which need less pruning, such as spreading yews and junipers. Even these, however, need a little pruning each year. One important fact to keep in mind — keep the low-growing types (spreaders or globe shrubs) under your windows and use the taller types at corners.

We have enjoyed hearing from so many AA readers since our first column appeared in the October issue. Please write whenever you think we can help and don't forget to tell us how you like our feature and how we can improve it for you.

Happy Holidays to all our gardening friends. We hope 1970 is kind to you all!

DO YOU HAVE . . .

A 1942 edition of the Good Housekeeping Cookbook you would part with? If so, please write **Mrs. Carl Ervin, 423 Black Latch Lane, Camp Hill, Pa. 17011.**

A copy of American Thread Co. Star Book No. 171 with instructions for crocheting and knitting suits, sweaters and stoles? **Mrs. F. Schwartzer, 344 Elm Ave., Maple Shade, N. J. 08052,** would like to find one.

Pieces of Arcadian Fine China in Lynnbrook Pattern? **Mrs. Donald Cummings, R. D. 2, Groton, N. Y. 13073,** says it was made in Newark New York, and the dishes have a dark green border with gold edge and a white flower in the center.

A 1941 or 1948 edition of "Recipes Tried and True by Cooks Tried and True"? **Mrs. Francis Ward, R. D. 1, Cavendish, Vt. 05142,** says the recipes were contributed by members of Home Demonstration Clubs of Windsor County, Vermont.

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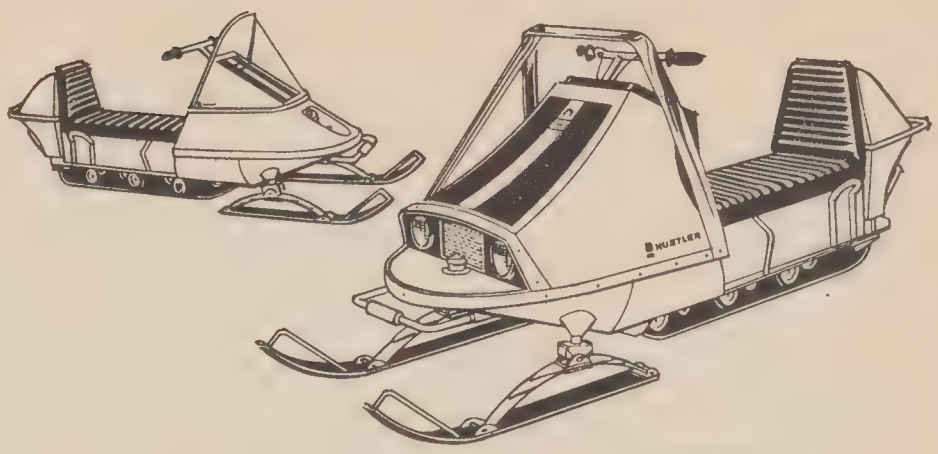

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MERRY CHRISTMAS & HAPPY NEW YEAR

Ed Eastman's Page

THE MOST PRECIOUS THING IN THE WORLD

I know not where His islands lift
Their fronded palms in air;
I only know we cannot drift
Beyond His love and care —Whittier

If you were asked to name the most important word in our language, I wonder what your answer would be. I know what mine is. It is love in all its many manifestations.

There are, of course, many different kinds of love. There is the love of friends; what would we do without them? In traveling the rough road of life, how it helps to feel the supporting hand of a friend under your arm, or to hear encouraging words of sympathy. There is the marvelous love of a mother for her child, shared by all the animal kingdom. How the meekest of animals can become a raging demon when her offspring is in danger. What sacrificing care and protection will any animal mother give her baby!

When I was running a dairy, we had a cow that hid her newborn calf so successfully that we searched in vain for hours to find it. Did you ever notice how a bird will almost let you catch it in order to entice you away from her nest filled with babies just hatched? What untold sacrifices fathers and mothers have undergone to give their children better opportunities than they themselves had.

Marriage Love

Then there is the love between a man and his wife who have traveled the long hard road together year after year, hand in hand. How wonderful that love is during the honeymoon days . . . how difficult it is to keep that love shining bright all during the long relationship. How important it is not to let that love slip when the children begin to come and the problems and perplexities of life tend to wear us down. How wonderful it is to find, when the children are grown and gone, that the marriage love is deeper and better than ever. How important it is to take all the necessary steps to keep your marriage love, love of friends, and your love of God alive so you can turn to it for your final security in the sunset years.

One of the most terrible things to live with when you have failed to keep your love alive is regret. It is awful to have to admit: "if only I had done so and so when I had the opportunity." The greatest failure in keeping love alive is the failure to communicate. "They can't read their tombstones when they are dead." How often have you told your friend, your relative, your wife or husband, that you love them? One little thing that would save many a heartache is never to go to bed or to sleep without kissing your wife or husband "goodnight". Never go to bed mad at anyone; never go to sleep without telling God all about it.

Now we are nearing Christmas time again and the new year . . . a time not of material presents but of spiritual love . . . a time when we make an extra effort to make happy those around and traveling with us; a time to shine up our love and to keep it shining not only this year but for all the years to come.

RETIREMENT

It's difficult for a man or woman in the prime of life, up to their necks in the pressing problems of the everyday work, to think anything about retiring, but believe me, the days will pass with lightning speed until suddenly the time comes when you must slow up or quit the regular job entirely. What will you do then?

Fortunate indeed is the man or woman who has planned for that time in advance. You may think that all you will want is just nothing do do . . . but after a few weeks of nothing to do time will drag and you will be the unhappiest person you know . . . and you may not last long after that.

Retirement does not mean stopping all activity. It means doing some of the things you always wanted to do. What are they? Only you can say. One suggestion. If you have been a farmer, plan to **manage** your farm and let someone do the hard work. Put your lifetime experience in good farm management to work and make more money than you ever had when your nose was too close to the grindstone. Keep records and good farm accounts.

If mechanically inclined, plan and outfit a good farm tool repair shop.

If you like to work with wood, set up a shop in your cellar and make or repair furniture.

There isn't a community, no matter how good, that does not need more leadership in church, school, farm organization, or cooperative.

Opportunities for the retired person are almost unlimited but the point is, **make your plans now.** It may be too late when the time comes.

Thirty-six Grandchildren and ten Great-grandchildren

Enthusiastic letters continue to come about Mr. Eastman's book, "Journey to Day Before Yesterday." Mrs. Frances Hammond writes:

"I am well over the seventy year mark, and have lived and seen so much that your book contains. I have a family of eleven, three girls and eight boys. They all have read the book. Five of the eight boys were in the service.

"I have read the book several times and now some member of the family has it. It is nice, clean, enjoyable reading for young or old. It is grand, and I hope more will read it."

Mrs. Frances Hammond, Penn Yan, N.Y.

P.S. "I have thirty-six grandchildren and ten great-grandchildren."

To get a copy, write to Book Department, American Agriculturist, Savings Bank Building, Ithaca, New York 14850. The price is $7.30 including tax.

IT STILL CAN BE DONE

There have been some very interesting letters in answer to the article I wrote for this page about getting started in farming. I wish I had room to print them all. Here are some of the conclusions I have reached after reading these excellent letters and talking with farmers on the subject:

One: It's not as easy to get started now as it was only a few years ago, but it still can be done if the couple is willing to work very hard, and if they have a deep love of animals, growing things, and country life.

Two: It is almost impossible to get started without some cash and credit.

Three: Some farm experience and agricultural education are necessary.

In discussing the subject, one letter writer said: "From a horrible experience in killing a child, I say keep all young children away from machinery."

Another young wife wrote of their hard experience in buying a farm, stocking it, and getting the necessary credit. Then she concluded her letter by saying, "We certainly know how rough a life farming can be, but it can also be very rewarding. We enjoy the out-of-doors, the animals, and the wonder of the newborn. It just seems unfair that someone can't help a farmer get started."

Another farm wife writes, "We got these things (farm equipment) by working for other farmers and doing custom work."

Running through the letters was this same idea in different words. "I can't begin to tell you how hard we worked. We kept trying to find a farm that we liked, and buy it. We were ridiculed, laughed at and ignored, . . . but they **underestimated** us. Gradually we got smart. We got credit, found the farm we wanted and were in business!"

Good Buy

Probably one of the best ways to get started is to enter a partnership with your father, relative, or friend, and gradually build up an equity in the business.

Somewhere in American Agriculturist land there is a farmer who wants to retire partly and needs a young man for a partner . . . and somewhere in American Agriculturist land is a young couple, perhaps with a little capital but some agricultural education or experience, who are willing to work and work hard. If you are in either of these classes, maybe I can help you if you will let me know.

BETTER MILK

We have milk deliveries at our house now only two days a week, yet we never have a bottle of spoiled or sour milk.

With modern refrigeration and inspection, milk two or three days old is just as good as it was when it came from the cow.

I used to think that the barn inspectors were ignorant, arrogant, and unreasonable in their demands. And some of them were . . . but over the years the inspectors have greatly improved, and dairymen realize that it is to their interest to keep the bacteria count down. The result is higher quality milk and more consumption.

EASTMAN'S CHESTNUT

My son Don told me this story. I got a big laugh, and maybe it will give you one. It's about a man complaining about his wife:

"She backed the car out of the garage, took the door off, smashed the kid's tricycle, gouged out the lawn, broke down the fence.

"And then . . . she lost control of the car."

SERVICE BUREAU

For The Northeast Farmer

by M. A. Parsons

SNOWMOBILES

"How can I protect myself from the snowmobile invaders and possible lawsuits?

"We are a snowmobile family, but as farmers we are also alarmed. Fences, fall plowing, woodchuck holes, drainage ditches, creek beds, etc., make it dangerous, especially for unsupervised children."

Last year the Legislature of New York State passed a law which specifically covers this question. As we understand it, a landowner in New York State cannot be held liable for accidents from snowmobiles on his land, unless injuries are a result of a known hazard about which the landowner knew but did not warn. This holds true even if he gives permission for the machines to be on his land.

The following is an exact quotation of Section 9-103 of the General Obligations Law:

OBLIGATIONS OF CARE–No duty to keep premises safe for certain uses; responsibility for acts of such users

1. Except as provided in subdivision two,

a. an owner, lessee or occupant of premises, whether or not posted as provided in section three hundred sixty-six of the conservation law, owes no duty to keep the premises safe for entry or use by others for hunting, fishing, trapping, hiking, horseback riding, snowmobile operation or training of dogs, or to give warning of any hazardous condition or use of or structure or activity on such premises to persons entering for such purposes;

b. an owner, lessee or occupant of premises who gives permission to another to pursue any such activities upon such premises does not thereby (1) extend any assurance that the premises are safe for such purpose, or (2) constitute the person to whom permission is granted an invitee to whom a duty of care is owed, or (3) assume responsibility for or incur liability for any injury to person or property caused by any act of persons to whom the permission is granted.

2. This section does not limit the liability which would otherwise exist

a. for willful or malicious failure to guard, or to warn against, a dangerous condition, use, structure or activity; or

b. for injury suffered in any case where permission to pursue any of the activities enumerated in this section was granted for a consideration other than the consideration, if any, paid to said landowner by the state or federal government, or permission to train dogs was granted for a consideration other than that provided for in section two hundred forty-two of the conservation law; or

c. for injury caused, by acts of persons to whom permission to pursue any of the activities enumerated in this section was granted, to other persons as to whom the person granting permission, or the owner, lessee or occupant of the premises, owed a duty to keep the premises safe or to warn of danger.

3. Nothing in this section creates a duty of care or ground of liability for injury to person or property. As amended L.1965, c. 367; L.1966, c. 886; L.1968, c. 7, eff. Sept. 1, 1968.

DON'T FORGET

You have doubtless been receiving all kinds of unordered cards and other articles through the mail at this time of year.

Under the New York State law, which became effective September 1, 1968, unordered merchandise received by New York State residents may be disposed of in any manner with no obligation to pay for it.

HOME STUDY

We receive numerous inquiries about the reliability of certain correspondence schools. If a school is accredited by the Accrediting Commission of the National Home Study Council, we feel it is reliable. This commission is a nationally recognized accrediting agency for private home study schools.

What does accreditation mean to home study students? It means that the school has been thoroughly examined and meets the following standards:

- It has a competent faculty.
- It offers educationally sound and up-to-date courses.
- It carefully screens students for admission.
- It provides satisfactory educational service.
- It has demonstrated ample student success and satisfaction.
- Its tuition charges are reasonable.
- It advertises its courses truthfully.
- It is financially able to deliver high quality educational service.

If you're interested in finding out what courses are available from accredited schools, send a postcard to the National Home Study Council, Washington, D. C. 20009, and request a free directory of schools and courses.

Home study has advantages as long as one understands what is offered and what the contract covers. A person should be sure he has the time, ability, and the perseverance, as well as the money, to complete the course, because once the contract is signed it is binding.

Agent Charles Nalbone of Jamestown, N.Y. delivers $4300.00 to Mrs. Edward J. Galligan of Arcade, N.Y.

TRACTOR ACCIDENT INJURIES FATAL

Thrown from his tractor, Mr. Galligan suffered a fractured pelvis, bruised kidney and other crushing injuries when the rear wheels rolled over him. The next six weeks were spent in the hospital. As he was leaving in a wheel chair he felt faint, they returned him to the intensive care unit where he passed away from a sudden blood clot. Carrying several North American policies a combination of benefits were paid—$3300 accident death benefits and $1000 medical expense benefits. Receiving the $4300 payment Mrs. Galligan gave this letter of thanks:

"Having lost my husband as the result of a tractor accident, I deeply appreciate the financial help from North American and the personal service given by our agent Charles Nalbone. I feel the policies are worth far more than they cost."

Mrs Edward Galligan

OTHER CLAIMS PAID

Donald J. Greenan, Andover, N.Y. — Fell off ladder—broke collarbone	$ 403.80
Herbert Underwood, Lisle, N.Y. — Bulldozer tipped over—broke rib	241.43
Lewis Westfall, East Otto, N.Y. — Kicked by cow—crushed foot	465.72
Lawrence A. Axton, Moravia, N.Y. — Thrown off wagon—broke ankle	154.26
Lawrence L. Abbey, Sinclairville, N.Y. — Struck by power saw—cut abdomen	947.45
Eleanor E. Findley, Mayville, N.Y. — Auto accident—cut head	362.17
James J. Gallo, Lowman, N.Y. — Trampled by cows—broke leg	555.81
George Bullock, Sherburne, N.Y. — Fell off tractor—broke wrist	342.20
Marinus Rovers, Chazy, N.Y. — Playing hockey—inj. ankle	107.14
Fannie H. Palmer, Cuyler, N.Y. — Auto accident—injured arm, leg	307.56
Herbert C. Baldauf, Delancey, N.Y. — Caught in chopper—cut finger	136.42
Robert S. Hinz, Chaffee, N.Y. — Hit by horse rig—inj. ankle	188.43
Jerry O'Connor, Chateaugay, N.Y. — Auto accident—multiple injuries	515.00
Laurence F. Vanish, Dolgeville, N.Y. — Tractor accident—broke wrist	315.71
Edward Sharp, Byron, N.Y. — Fell—broke leg	671.59
James Foster, Newport, N.Y. — Auto accident—broke jaw	338.56
George E. Jones, Dolgeville, N.Y. — Power saw acc.—cut hand	122.14
Garmon Roggie, Jr., Dec'd, Woodville, N.Y. — Auto accident—loss of life	2,250.00
David C. Meister, Carthage, N.Y. — Slipped and fell on ice—inj. back	1,048.50
Dorothy Bloss, Carthage, N.Y. — Fell down cellar stairs—head injury	1,385.55
Mary C. Micek, Copenhagen, N.Y. — Pushed by heifer—cut leg	385.68
Martin J. Hirsch, Lowville, N.Y. — Playing basketball, fell—broke leg	201.50
James W. Jacobs, Munnsville, N.Y. — Fell from tractor—inj. ribs	245.70
Donald B. White, Webster, N.Y. — Butted by cow—broke leg	449.28
Melvin Seeley, St. Johnsville, N.Y. — Ladder tipped—injured leg	146.35
Leland C. Wilkins, Lockport, N.Y. — Fell on grain bin—cut leg	510.75
Evelyn H. Hopper, Boonville, N.Y. — Auto acc.—broke knee	1,560.00
Eugene A. Barber, Manlius, N.Y. — Crushed by cow—inj. back	432.58
Edward Davie, Geneva, N.Y. — Caught in tractor hitch—broke toe	422.80
Floyd G. Bristol, Altmar, N.Y. — Knocked down by cow—inj. ribs	$ 186.42
Graydon Coon, Dec'd, Morris, N.Y. — Fell from barn loft—loss of life	1,000.00
Randy Woods, Brasher Falls, N.Y. — Caught in hydraulic lift—inj. foot	201.42
Milton Sutton, Dec'd, Savona, N.Y. — Tractor overturned—loss of life	1,650.00
Katherine Konopski, Bradford, N.Y. — Kicked by cow—inj. back	257.15
Carl H. Lewis, Bath, N.Y. — Uncapping silo—monoxide poisoning	229.39
Dewitt Y. Warner, Calverton, N.Y. — Steel chisel broke—inj. eye	282.50
Walter Kobylenski, Sr., Calverton, N.Y. — Potato loader fell—inj. chest	347.28
Sharon Buck, Nichols, N.Y. — Fell from horse—injured knee	1,122.86
Cora Robinson, Phoenicia, N.Y. — Fell on porch—broke hip	1,224.28
Howard B. Gillis, Argyle, N.Y. — Fell in tub—body burns	1,029.05
Ralph G. Cator, Palmyra, N.Y. — Fell from hay mow—broke pelvis	1,921.43
Lawrence A. Rasbeck, Wolcott, N.Y. — Auto accident—inj. neck	443.60
Richard C. Wolf, Attica, N.Y. — Hit by tree limb—nose injury	430.74
Richard E. Sund, Bliss, N.Y. — Fell into well—inj. chest	132.82
Martin D. Coates, Wysox, Pa. — Tire iron slipped—broke teeth	184.00
Clyde H. Peters, Waterford, Pa. — Stepped on by cow—broke leg	151.42
LaRue Saunders, Gillett, Pa. — Auto accident—inj. ribs	379.25
Herbert Kymer, Sussex, N.J. — Truck accident—head, shoulder injuries	2,527.04
E. David Kilts, Belvidere, N.J. — Motorcycle accident—broke hand	120.00
Francis Quade, Medford, N.J. — Attacked by hog—inj. hand, forearm	189.40
George Breese, Freehold, N.J. — Auto accident—broke hip	1,069.96
Gertrude M. Damon, Dec'd, Ashfield, Mass. — Auto accident—loss of life	1,250.00
Joseph Parzych, Gill, Mass. — Bumped hot exhaust—burned elbow	172.95
Evelyn M. Ham, Monmouth, Me. — Stepped in hole—broke wrist	260.50
Malcolm R. Patten, West Springfield, N.H. — Struck by log—inj. back	115.70
Francis M. Downs, Brandon, Vt. — Log rolled off truck—broke toe	152.86
Philip G. Ryan, Enosburg Falls, Vt. — Caught in stanchion—broke arm	169.00
Willard Kenyon, Bartonsville, Vt. — Truck slipped off blocking—head injuries	1,004.90

Keep Your Policies Renewed

NORTH AMERICAN ACCIDENT INSURANCE COMPANY

(In New York State)

NORTH AMERICAN COMPANY

FOR LIFE AND HEALTH INSURANCE (In Other States)

GENERAL OFFICES: CHICAGO, ILLINOIS

SAVINGS BANK BUILDING ITHACA, NEW YORK

We hate to dampen the spirits of other trucks. But scrappage records show Chevy pickups outlast others.

What makes us so tough? For one thing, we use two pieces of sheet metal in our cab. Double-wall it, for strength.

And we build our independent front suspension to expect the worst from a road. Without getting rattled.

Another thing. We just won't leave well enough alone. For instance, you can now order a powerful new additive for regular gas: a 400-cubic-inch V8.

It's not that we're out to make it tough for other trucks. We're out to make it easier for you.

Because putting you first, keeps us first.

CHEVROLET

On the move.

You'll still be washing it when other '70's are washed up.